

State of Colorado



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DATE: June 6, 2002

TO: Agency Personnel Administrators

FROM: Jeffrey C. Schutt
Director, Division of Human Resources

SUBJECT: Implementation of System Changes, JEL 02-8

The system changes indicated on the accompanying chart are approved for implementation. The changes include the first phases of the Enforcement and Protective Services (EPS) consolidation study and the Physical Science and Engineering (PSE) consolidation study, the second phases of the Health Care Services (HCS) consolidation study and the Clinical Therapist study, the final recommendations for the Police Communications study, the Library Technician pay grades, and the abolished vacant classes.

The effective date for each change is indicated on the attached "Summary of System Changes" chart. If the changes involve class descriptions and/or class placements, they are also included. Please provide this information to appointing authorities, directly affected employees, and any others in your agency who may need this information. Information is also available on the web at <http://www.state.co.us/dhr/>.

If you have any questions, please contact Total Compensation/Systems staff at 303-866-2455.

SUMMARY OF SYSTEM CHANGES

JEL 02-8
Date of Letter: 6/6/02

Total Compensation and Systems Support

* P = proposed; F = final (only F is to be entered into EMPL and ADS)

P or F*	CD Changes			Current Class		New Class		Occ Grp		Grade		Pay Diff.		Effective Date
	New	Rev	Abol	Code	Title (limit 25 characters)	Code	Title (limit 25 characters)	From	To	From	To	From	To	
New EPS Classes														
F	X					A1D1IX	Cor,Yth,Clin Sec Intern	EPS	EPS	A13	A13	1	1	7/1/02
F	X					A1D2TX	Cor,Yth,Clin Sec Off I	EPS	EPS	A22	A22	1	1	7/1/02
F	X					A1D3XX	Cor,Yth,Clin Sec Off II	EPS	EPS	A26	A26	1	1	7/1/02
F	X					A1D4XX	Cor,Yth,Clin Sec Spec III	EPS	EPS	A30	A30	1	1	7/1/02
F	X					A1D5XX	Cor,Yth,Clin Sec Supv III	EPS	EPS	A30	A30	1	1	7/1/02
F	X					A1D6XX	Corr or Youth Sec Off IV	EPS	EPS	A36	A36	1	1	7/1/02
F	X					A1D7XX	Corr or Youth Sec Off V	EPS	EPS	A40	A40	0	0	7/1/02
F	X					A1L1TX	Cor Supp Trades Supv I	EPS	EPS	A26	A26	1	1	7/1/02
F	X					A1L2XX	Cor Supp Trades Supv II	EPS	EPS	A30	A30	1	1	7/1/02
F	X					A1L3XX	Cor Supp Trades Supv III	EPS	EPS	A36	A36	0	0	7/1/02
F	X					A1L4XX	Cor Supp Trades Supv IV	EPS	EPS	A40	A40	0	0	7/1/02
F	X					A3C1TX	Community Parole Off	EPS	EPS	A33	A92*	0	0	7/1/02
F	X					A3C2XX	Community Parole Team Ldr	EPS	EPS	A35	A35	0	0	7/1/02
F	X					A3C3XX	Community Parole Supv	EPS	EPS	A39	A39	0	0	7/1/02

P or F*	CD Changes			Current Class		New Class		Occ Grp		Grade		Pay Diff.		Effective Date
	New	Rev	Abol	Code	Title (limit 25 characters)	Code	Title (limit 25 characters)	From	To	From	To	From	To	
F	X					A3C4XX	Community Parole Mgr	EPS	EPS	A43	A43	0	0	7/1/02
Converted/Revised EPS Classes														
F		X		A1B1T*	Corrl/Secur Serv Off I	A1D2TX	Cor,Yth,Clin Sec Off I	EPS	EPS	A22	A22	1	1	7/1/02
F		X		A1B2**	Corrl/Secur Serv Off II	A1D3XX	Cor,Yth,Clin Sec Off II	EPS	EPS	A26	A26	1	1	7/1/02
F		X		A1B3**	Corr/Sec Svs Off III Spec	A1D4XX	Cor,Yth,Clin Sec Spec III	EPS	EPS	A30	A30	1	1	7/1/02
F		X		A1B4**	Corr/Sec Svs Off III Supv	A1D5XX	Cor,Yth,Clin Sec Supv III	EPS	EPS	A30	A30	1	1	7/1/02
F		X		A1B5**	Corrl Officer IV	A1D6XX	Corr or Youth Sec Off IV	EPS	EPS	A36	A36	1	1	7/1/02
F		X		A1B6**	Corrl Officer V	A1D7XX	Corr or Youth Sec Off V	EPS	EPS	A40	A40	0	0	7/1/02
F		X		A1D1I*	Corrl/Secur Serv Intern	A1D1IX	Cor,Yth,Clin Sec Intern	EPS	EPS	A13	A13	1	1	7/1/02
F		X		A1F1TX	Corrl Supp Food Supv I	A1L1TX	Cor Supp Trades Supv I	EPS	EPS	A26	A26	1	1	7/1/02
F		X		A1F2XX	Corrl Supp Food Supv II	A1L2XX	Cor Supp Trades Supv II	EPS	EPS	A30	A30	1	1	7/1/02
F		X		A1F3XX	Corrl Supp Food Supv III	A1L3XX	Cor Supp Trades Supv III	EPS	EPS	A36	A36	0	0	7/1/02
F		X		A1F4XX	Corrl Supp Food Supv IV	A1L4XX	Cor Supp Trades Supv IV	EPS	EPS	A40	A40	0	0	7/1/02
F		X		A1G1TX	Corrl Supp Maint Supv I	A1L1TX	Corrl Supp Trades Supv I	EPS	EPS	A26	A26	1	1	7/1/02
F		X		A1G2XX	Corrl Supp Maint Sup v II	A1L2XX	Corrl Supp Trades Supv II	EPS	EPS	A30	A30	1	1	7/1/02
F		X		A1G3XX	Corrl Supp Maint Supv III	A1L3XX	Corrl Supp Trades Supv III	EPS	EPS	A36	A36	0	0	7/1/02
F		X		A1J1TX	Corrl Supp Other Supv I	A1L1TX	Corrl Supp Trades Supv I	EPS	EPS	A26	A26	1	1	7/1/02
F		X		A1J2XX	Corrl Supp Other Supv II	A1L2XX	Cor Supp Trades Supv II	EPS	EPS	A30	A30	1	1	7/1/02
F		X		A1J3XX	Corrl Supp Other Supv III	A1L3XX	Cor Supp Trades Supv III	EPS	EPS	A36	A36	0	0	7/1/02
F		X		A3A1IX	Comm Programs Intern	A3C1TX	Community Parole Off	EPS	EPS	A23	A92*	0	0	7/1/02
F		X		A3A2TX	Comm Programs Agent I	A3C1TX	Community Parole Off	EPS	EPS	A27	A92*	0	0	7/1/02

P or F*	CD Changes			Current Class		New Class		Occ Grp		Grade		Pay Diff.		Effective Date
	New	Rev	Abol	Code	Title (limit 25 characters)	Code	Title (limit 25 characters)	From	To	From	To	From	To	
F		X		A3A3XX	Comm Programs Agent II	A3C1TX	Community Parole Off	EPS	EPS	A33	A92*	0	0	7/1/02
F		X		A3A4XX	Comm Programs Agent III	A3C2XX	Community Parole Team Ldr	EPS	EPS	A35	A35	0	0	7/1/02
F		X		A3A5XX	Comm Programs Admin I	A3C3XX	Community Parole Supv	EPS	EPS	A39	A39	0	0	7/1/02
F		X		A3A6XX	Comm Programs Admin II	A3C4XX	Community Parole Mgr	EPS	EPS	A43	A43	0	0	7/1/02
F		X		A3B1IX	Parole Officer Intern	A3C1TX	Community Parole Off	EPS	EPS	A23	A92*	0	0	7/1/02
F		X		A3B2TX	Parole Officer I	A3C1TX	Community Parole Off	EPS	EPS	A27	A92*	0	0	7/1/02
F		X		A3B3XX	Parole Officer II	A3C1TX	Community Parole Off	EPS	EPS	A33	A92*	0	0	7/1/02
F		X		A3B4XX	Parole Officer III	A3C2XX	Community Parole Team Ldr	EPS	EPS	A35	A35	0	0	7/1/02
F		X		A3B5XX	Parole Supervisor	A3C3XX	Community Parole Supv	EPS	EPS	A39	A39	0	0	7/1/02
F		X		A3B6XX	Parole Manager	A3C4XX	Community Parole Mgr	EPS	EPS	A43	A43	0	0	7/1/02
F		X		A4A1IX	Patrol Intern	A4A1IX	State Patrol Intern	EPS	EPS	A81	A81	0	0	7/1/02
F		X		A4A3TX	Trooper	A4A3TX	State Patrol Trooper	EPS	EPS	A82	A82	0	0	7/1/02
F		X		A4A4XX	Trooper III	A4A4XX	State Patrol Trooper III	EPS	EPS	A83	A83	0	0	7/1/02
F		X		A4A5XX	Patrol Supervisor	A4A5XX	State Patrol Supervisor	EPS	EPS	A84	A84	0	0	7/1/02
F		X		A4A6XX	Patrol Administrator I	A4A6XX	State Patrol Admin I	EPS	EPS	A85	A85	0	0	7/1/02
F		X		A4A7XX	Patrol Administrator II	A4A7XX	State Patrol Admin II	EPS	EPS	A86	A86	0	0	7/1/02
F		X		A4B1IX	Police Intern	A4B1IX	Police Officer Intern	EPS	EPS	A23	A23	0	0	7/1/02
F		X		A9B1TX	Asst Chf Wildlife Law Enf	A2A3XX	Criminal Investigator II	EPS	EPS	A44	A44	0	0	7/1/02
Abolished EPS classes														
F			X	A1B1T*	Corrl/Secur Serv Off I		Abolish – converted							7/1/02
F			X	A1B2**	Corrl/Secur Serv Off II		Abolish – converted							7/1/02

P or F*	CD Changes			Current Class		New Class		Occ Grp		Grade		Pay Diff.		Effective Date
	New	Rev	Abol	Code	Title (limit 25 characters)	Code	Title (limit 25 characters)	From	To	From	To	From	To	
F			X	A1B3**	Corr/Sec Svs Off III Spec		Abolish – converted							7/1/02
F			X	A1B4**	Corr/Sec Svs Off III Supv		Abolish – converted							7/1/02
F			X	A1B5**	Corrl Officer IV		Abolish – converted							7/1/02
F			X	A1B6**	Corrl Officer V		Abolish – converted							7/1/02
F			X	A1D1I*	Corrl/Secur Serv Intern		Abolish – converted							7/1/02
F			X	A1F1TX	Corrl Supp Food Supv I		Abolish – converted							7/1/02
F			X	A1F2XX	Corrl Supp Food Supv II		Abolish – converted							7/1/02
F			X	A1F3XX	Corrl Supp Food Supv III		Abolish – converted							7/1/02
F			X	A1F4XX	Corrl Supp Food Supv IV		Abolish – converted							7/1/02
F			X	A1G1TX	Corrl Supp Maint Supv I		Abolish – converted							7/1/02
F			X	A1G2XX	Corrl Supp Maint Supv II		Abolish – converted							7/1/02
F			X	A1G3XX	Corrl Supp Maint Supv III		Abolish – converted							7/1/02
F			X	A1J1TX	Corrl Supp Other Supv I		Abolish – converted							7/1/02
F			X	A1J2XX	Corrl Supp Other Supv II		Abolish – converted							7/1/02
F			X	A1J3XX	Corrl Supp Other Supv III		Abolish – converted							7/1/02
F			X	A3A1IX	Comm Programs Intern		Abolish – converted							7/1/02
F			X	A3A2TX	Comm Programs Agent I		Abolish – converted							7/1/02
F			X	A3A3XX	Comm Programs Agent II		Abolish – converted							7/1/02
F			X	A3A4XX	Comm Programs Agent III		Abolish – converted							7/1/02
F			X	A3A5XX	Comm Programs Admin I		Abolish – converted							7/1/02
F			X	A3A6XX	Comm Programs Admin II		Abolish – converted							7/1/02

P or F*	CD Changes			Current Class		New Class		Occ Grp		Grade		Pay Diff.		Effective Date
	New	Rev	Abol	Code	Title (limit 25 characters)	Code	Title (limit 25 characters)	From	To	From	To	From	To	
F			X	A3B1IX	Parole Officer Intern		Abolish – converted							7/1/02
F			X	A3B2TX	Parole Officer I		Abolish – converted							7/1/02
F			X	A3B3XX	Parole Officer II		Abolish – converted							7/1/02
F			X	A3B4XX	Parole Officer III		Abolish – converted							7/1/02
F			X	A3B5XX	Parole Supervisor		Abolish – converted							7/1/02
F			X	A3B6XX	Parole Manager		Abolish – converted							7/1/02
F			X	A9B1TX	Asst Chf Wildlife Law Enf		Abolish – converted							7/1/02
Converted HCS Classes (HCS Study Phase II)														
F		X		C1B3**	Clinical Therapy Asst III	C5L3XX	Therapy Assistant III	HCS	HCS	C34	C36	1	1	7/1/02
F		X		C1C4XX	Dev Disab Prog Mgr I	C7C6XX	Health Professional VI	HCS	HCS	C61	C62	0	0	7/1/02
F		X		C1C5XX	Dev Disab Prog Mgr II	C7C7XX	Health Professional VII	HCS	HCS	C64	C66	0	0	7/1/02
F		X		C1D1TX	Devel Disab Aide	C6P1TX	Client Care Aide I	HCS	HCS	C10	C14	1	3	7/1/02
F		X		C1D3TX	Devel Disab Tech I	C6R1TX	Health Care Technician I	HCS	HCS	C26	C28	1	3	7/1/02
F		X		C1D5XX	Devel Disab Tech III	C6R4XX	Health Care Technician IV	HCS	HCS	C36	C38	1	1	7/1/02
F		X		C1E2TX	Occ/Phys Therapist II	C5K2TX	Therapist II	HCS	HCS	C46	C47	1	1	7/1/02
F		X		C1E3XX	Occ/Phys Therapist III	C5K3XX	Therapist III	HCS	HCS	C50	C52	0	0	7/1/02
F		X		C1E5XX	Occ/Phys Therapist V	C7C6XX	Health Professional VI	HCS	HCS	C63	C62	0	0	7/1/02
F		X		C1G1TX	Special Education Tech I	C6R1TX	Health Care Technician I	HCS	HCS	C26	C28	1	3	7/1/02
F		X		C1G2XX	Special Education Tech II	C6R2XX	Health Care Technician II	HCS	HCS	C28	C30	1	1	7/1/02
F		X		C1G3XX	Special Education Tech III	C6R3XX	Health Care Technician III	HCS	HCS	C32	C34	1	1	7/1/02
F		X		C1G4XX	Special Education Tech IV	C6R4XX	Health Care Technician IV	HCS	HCS	C40	C38	0	1	7/1/02

P or F*	CD Changes			Current Class		New Class		Occ Grp		Grade		Pay Diff.		Effective Date
	New	Rev	Abol	Code	Title (limit 25 characters)	Code	Title (limit 25 characters)	From	To	From	To	From	To	
F		X		C2A1T*	Aud-Speech/Lang Spec I	C5K2TX	Therapist II	HCS	HCS	C45	C47	1	1	7/1/02
F		X		C2A2**	Aud-Speech/Lang Spec II	C5K3XX	Therapist III	HCS	HCS	C51	C52	1	0	7/1/02
F		X		C2A3**	Aud-Speech/Lang Spec III	C5K4XX	Therapist IV	HCS	HCS	C53	C59	1	0	7/1/02
F		X		C2A4**	Aud-Speech/Lang Spec IV	C7C6XX	Health Professional VI	HCS	HCS	C57	C62	1	0	7/1/02
F		X		C2B1I*	Dietitian I	C8B1IX	Dietitian I	HCS	HCS	C42	C40	1	1	7/1/02
F		X		C2B2T*	Dietitian II	C8B2TX	Dietitian II	HCS	HCS	C46	C44	1	1	7/1/02
F		X		C2B3**	Dietitian III	C8B3XX	Dietitian III	HCS	HCS	C50	C48	1	1	7/1/02
F		X		C2C1TX	Child Care Aide	J2B1TX	Child Care Aide	HCS	T	C17	J11	1	1	7/1/02
F		X		C2C2XX	Early Childhood Educator I	J2B2XX	Early Childhood Educator I	HCS	T	C21	J15	1	1	7/1/02
F		X		C2C3XX	Early Childhood Educator II	J2B3XX	Early Childhood Educator II	HCS	T	C25	J19	1	1	7/1/02
F		X		C2E1T*	Hlth Facil Comp Survey I	C7C2TX	Health Professional II	HCS	HCS	C45	C44	0	0	7/1/02
F		X		C2E2**	Hlth Facil Comp Survey II	C7C4XX	Health Professional IV	HCS	HCS	C52	C54	0	0	7/1/02
F		X		C2E3**	Hlth Facil Comp Survey III	C7C5XX	Health Professional V	HCS	HCS	C61	C58	0	0	7/1/02
F		X		C2G1**	Pharmacy Inspector I	C8E1XX	Pharmacy I	HCS	HCS	C59	C60	0	1	7/1/02
F		X		C2G2**	Pharmacy Inspector II	C8E2XX	Pharmacy II	HCS	HCS	C63	C64	0	1	7/1/02
F		X		C2H1XX	Pharmacist I	C8E1XX	Pharmacy I	HCS	HCS	C57	C60	1	1	7/1/02
F		X		C2H2XX	Pharmacist II	C8E2XX	Pharmacy II	HCS	HCS	C61	C64	1	1	7/1/02
F		X		C2K1XX	Veterinarian I	C9B1XX	Veterinarian I	HCS	HCS	C69	C65	0	0	7/1/02
F		X		C2K2XX	Veterinarian II	C9B2XX	Veterinarian II	HCS	HCS	C73	C69	0	0	7/1/02
F		X		C2K3XX	Veterinarian III	C9B3XX	Veterinarian III	HCS	HCS	C76	C72	0	0	7/1/02
F		X		C2L1XX	Primary Care Supervisor	C6S5XX	Nurse V	HCS	HCS	C60	C62	1	0	7/1/02

P or F*	CD Changes			Current Class		New Class		Occ Grp		Grade		Pay Diff.		Effective Date
	New	Rev	Abol	Code	Title (limit 25 characters)	Code	Title (limit 25 characters)	From	To	From	To	From	To	
F		X		C3A1TX	Cardiovascular Technician	C8A1TX	Diag Proced Technol I	HCS	HCS	C24	C27	3	3	7/1/02
F		X		C3F2XX	Dental Hygienist II	C6Q5XX	Dental Care V	HCS	HCS	C44	C46	0	0	7/1/02
F		X		C3G1TX	Dental Lab Techn I	C8D3XX	Laboratory Technology III	HCS	HCS	C48	C47	0	3	7/1/02
F		X		C3G2XX	Dental Lab Techn II	C8D4XX	Laboratory Technology IV	HCS	HCS	C50	C51	0	3	7/1/02
F		X		C3I1TX	EEG Tech I	C8A2XX	Diag Proced Technol II	HCS	HCS	C30	C33	3	3	7/1/02
F		X		C3J1XX	Nuclear Medicine Tech	C8A3XX	Diag Proced Technol III	HCS	HCS	C39	C42	3	3	7/1/02
F		X		C3L2XX	Radiologic Techn II	C8A3XX	Diag Proced Technol III	HCS	HCS	C38	C42	3	3	7/1/02
F		X		C3L3XX	Radiologic Techn III	C8A4XX	Diag Proced Technol IV	HCS	HCS	C43	C50	0	0	7/1/02
F		X		C3M1TX	Respiratory Therapy Tech	C8A2XX	Diag Proced Technol II	HCS	HCS	C30	C33	1	3	7/1/02
F		X		C3O1T*	Veterinary Assistant	C9A1TX	Animal Care I	HCS	HCS	C23	C24	1	1	7/1/02
F		X		C3P2XX	Veterinary Specialist II	C9C3XX	Veterinary Technology III	HCS	HCS	C37	C38	1	1	7/1/02
F		X		C3P3XX	Veterinary Specialist III	C9C4XX	Veterinary Technology IV	HCS	HCS	C39	C41	1	1	7/1/02
F		X		C3Q1IX	Veterinary Technician Int	C7D2IX	HCS Trainee II	HCS	HCS	C23	C22	1	1	7/1/02
F		X		C3R1TX	Ultrasound Technologist	C8A3XX	Diag Proced Technol III	HCS	HCS	C39	C42	3	3	7/1/02
F		X		C4A2XX	Histology Technician II	C8D2XX	Laboratory Technology II	HCS	HCS	C43	C41	1	3	7/1/02
F		X		C4B1IX	Laboratory Asst Intern	C7D1IX	HCS Trainee I	HCS	HCS	C15	C14	1	1	7/1/02
F		X		C4B2TX	Laboratory Asst I	C8C1TX	Laboratory Support I	HCS	HCS	C19	C17	1	1	7/1/02
F		X		C4B6XX	Laboratory Technician II	C8D2XX	Laboratory Technology II	HCS	HCS	C43	C41	1	3	7/1/02
F		X		C4C1IX	Medical Technol Intern	C8D1TX	Laboratory Technology I	HCS	HCS	C36	C37	3	3	7/1/02
F		X		C5D1TX	Mental Hlth Prog Spec I	C7C6XX	Health Professional VI	HCS	HCS	C61	C62	0	0	7/1/02
F		X		C5D2XX	Mental Hlth Prog Spec II	C7C7XX	Health Professional VII	HCS	HCS	C63	C66	0	0	7/1/02

P or F*	CD Changes			Current Class		New Class		Occ Grp		Grade		Pay Diff.		Effective Date
	New	Rev	Abol	Code	Title (limit 25 characters)	Code	Title (limit 25 characters)	From	To	From	To	From	To	
F		X		C5F2TX	Psychiatric Care Tech I	C6R1TX	Health Care Technician I	HCS	HCS	C26	C28	1	3	7/1/02
F		X		C5H1TX	Social Work Assoc/Intern	C4L1TX	Social Work/Counselor I	HCS	HCS	C37	C39	0	1	7/1/02
F		X		C5H5XX	Social Worker Program Dir	C7C7XX	Health Professional VII	HCS	HCS	C56	C66	0	0	7/1/02
F		X		C6B1XX	Nurse I	C6S1XX	Nurse I	HCS	HCS	C45	C47	1	1	7/1/02
F		X		C6B3XX	Nurse III	C6S3XX	Nurse III	HCS	HCS	C52	C53	1	1	7/1/02
F		X		C6B4XX	Nurse IV	C6S4XX	Mid-Level Provider	HCS	HCS	C56	C57	1	1	7/1/02
F		X		C6C2TX	Nurse Aide	C6P2XX	Client Care Aide II	HCS	HCS	C18	C20	3	3	7/1/02
F		X		C6E1XX	Nurse Practitioner I	C6S4XX	Mid-Level Provider	HCS	HCS	C55	C57	1	1	7/1/02
F		X		C6F1XX	Nurse Specialist	C6S3XX	Nurse III	HCS	HCS	C51	C53	1	1	7/1/02
F		X		C6H1XX	Public Hlth Nurse Consult	C7E1XX	Nurse Consultant	HCS	HCS	C64	C62	0	0	7/1/02
F		X		C6J1XX	Clinical Nurse Specialist	C6S4XX	Mid-Level Provider	HCS	HCS	C58	C57	0	1	7/1/02
Abolished HCS classes														
F			X	C1B3**	Clinical Therapy Asst III		Abolish – converted							7/1/02
F			X	C1C4XX	Dev Disab Prog Mgr I		Abolish – converted							7/1/02
F			X	C1C5XX	Dev Disab Prog Mgr II		Abolish – converted							7/1/02
F			X	C1D1TX	Devel Disab Aide		Abolish – converted							7/1/02
F			X	C1D3TX	Devel Disab Tech I		Abolish – converted							7/1/02
F			X	C1D5XX	Devel Disab Tech III		Abolish – converted							7/1/02
F			X	C1E2TX	Occ/Phys Therapist II		Abolish – converted							7/1/02
F			X	C1E3XX	Occ/Phys Therapist III		Abolish – converted							7/1/02
F			X	C1E5XX	Occ/Phys Therapist V		Abolish – converted							7/1/02

P or F*	CD Changes			Current Class		New Class		Occ Grp		Grade		Pay Diff.		Effective Date
	New	Rev	Abol	Code	Title (limit 25 characters)	Code	Title (limit 25 characters)	From	To	From	To	From	To	
F			X	C1G1TX	Special Education Tech I		Abolish – converted							7/1/02
F			X	C1G2XX	Special Education Tech II		Abolish – converted							7/1/02
F			X	C1G3XX	Special Education Tech III		Abolish – converted							7/1/02
F			X	C1G4XX	Special Education Tech IV		Abolish – converted							7/1/02
F			X	C2A1T*	Aud-Speech/Lang Spec I		Abolish – converted							7/1/02
F			X	C2A2**	Aud-Speech/Lang Spec II		Abolish – converted							7/1/02
F			X	C2A3**	Aud-Speech/Lang Spec III		Abolish – converted							7/1/02
F			X	C2A4**	Aud-Speech/Lang Spec IV		Abolish – converted							7/1/02
F			X	C2B1I*	Dietitian I		Abolish – converted							7/1/02
F			X	C2B2T*	Dietitian II		Abolish – converted							7/1/02
F			X	C2B3**	Dietitian III		Abolish – converted							7/1/02
F			X	C2C1TX	Child Care Aide		Abolish – converted							7/1/02
F			X	C2C2XX	Early Childhood Educator I		Abolish – converted							7/1/02
F			X	C2C3XX	Early Childhood Educator II		Abolish – converted							7/1/02
F			X	C2E1T*	Hlth Facil Comp Survey I		Abolish – converted							7/1/02
F			X	C2E2**	Hlth Facil Comp Survey II		Abolish – converted							7/1/02
F			X	C2E3**	Hlth Facil Comp Survey III		Abolish – converted							7/1/02
F			X	C2G1**	Pharmacy Inspector I		Abolish – converted							7/1/02
F			X	C2G2**	Pharmacy Inspector II		Abolish – converted							7/1/02
F			X	C2H1XX	Pharmacist I		Abolish – converted							7/1/02
F			X	C2H2XX	Pharmacist II		Abolish – converted							7/1/02

P or F*	CD Changes			Current Class		New Class		Occ Grp		Grade		Pay Diff.		Effective Date
	New	Rev	Abol	Code	Title (limit 25 characters)	Code	Title (limit 25 characters)	From	To	From	To	From	To	
F			X	C2K1XX	Veterinarian I		Abolish – converted							7/1/02
F			X	C2K2XX	Veterinarian II		Abolish – converted							7/1/02
F			X	C2K3XX	Veterinarian III		Abolish – converted							7/1/02
F			X	C2L1XX	Primary Care Supervisor		Abolish – converted							7/1/02
F			X	C3A1TX	Cardiovascular Technician		Abolish – converted							7/1/02
F			X	C3F2XX	Dental Hygienist II		Abolish – converted							7/1/02
F			X	C3G1TX	Dental Lab Techn I		Abolish – converted							7/1/02
F			X	C3G2XX	Dental Lab Techn II		Abolish – converted							7/1/02
F			X	C3I1TX	EEG Tech I		Abolish – converted							7/1/02
F			X	C3J1XX	Nuclear Medicine Tech		Abolish – converted							7/1/02
F			X	C3L2XX	Radiologic Techn II		Abolish – converted							7/1/02
F			X	C3L3XX	Radiologic Techn III		Abolish – converted							7/1/02
F			X	C3M1TX	Respiratory Therapy Tech		Abolish – converted							7/1/02
F			X	C3O1T*	Veterinary Assistant		Abolish – converted							7/1/02
F			X	C3P2XX	Veterinary Specialist II		Abolish – converted							7/1/02
F			X	C3P3XX	Veterinary Specialist III		Abolish – converted							7/1/02
F			X	C3Q1IX	Veterinary Technician Int		Abolish – converted							7/1/02
F			X	C3R1TX	Ultrasound Technologist		Abolish – converted							7/1/02
F			X	C4A2XX	Histology Technician II		Abolish – converted							7/1/02
F			X	C4B1IX	Laboratory Asst Intern		Abolish – converted							7/1/02
F			X	C4B2TX	Laboratory Asst I		Abolish – converted							7/1/02

P or F*	CD Changes			Current Class		New Class		Occ Grp		Grade		Pay Diff.		Effective Date
	New	Rev	Abol	Code	Title (limit 25 characters)	Code	Title (limit 25 characters)	From	To	From	To	From	To	
F			X	C4B6XX	Laboratory Technician II		Abolish – converted							7/1/02
F			X	C4C1IX	Medical Technol Intern		Abolish – converted							7/1/02
F			X	C5D1TX	Mental Hlth Prog Spec I		Abolish – converted							7/1/02
F			X	C5D2XX	Mental Hlth Prog Spec II		Abolish – converted							7/1/02
F			X	C5F2TX	Psychiatric Care Tech I		Abolish – converted							7/1/02
F			X	C5H1TX	Social Work Assoc/Intern		Abolish – converted							7/1/02
F			X	C5H5XX	Social Worker Program Dir		Abolish – converted							7/1/02
F			X	C6B1XX	Nurse I		Abolish – converted							7/1/02
F			X	C6B3XX	Nurse III		Abolish – converted							7/1/02
F			X	C6B4XX	Nurse IV		Abolish – converted							7/1/02
F			X	C6C2TX	Nurse Aide		Abolish – converted							7/1/02
F			X	C6E1XX	Nurse Practitioner I		Abolish – converted							7/1/02
F			X	C6F1XX	Nurse Specialist		Abolish – converted							7/1/02
F			X	C6H1XX	Public Hlth Nurse Consult		Abolish – converted							7/1/02
F			X	C6J1XX	Clinical Nurse Specialist		Abolish – converted							7/1/02
Clinical Therapist Study – no changes														
F				C5J1IX	Clinical Therapist I	C5J1IX	Clinical Therapist I	HCS	HCS	C33	C33	1	1	7/1/02
F				C5J2TX	Clinical Therapist II	C5J2TX	Clinical Therapist II	HCS	HCS	C37	C37	1	1	7/1/02
F				C5J3XX	Clinical Therapist III	C5J3XX	Clinical Therapist III	HCS	HCS	C41	C41	0	0	7/1/02
F				C5J4XX	Clinical Therapist IV	C5J4XX	Clinical Therapist IV	HCS	HCS	C50	C50	0	0	7/1/02
F				C5J5XX	Clinical Therapist V	C5J5XX	Clinical Therapist V	HCS	HCS	C54	C54	0	0	7/1/02

P or F*	CD Changes			Current Class		New Class		Occ Grp		Grade		Pay Diff.		Effective Date
	New	Rev	Abol	Code	Title (limit 25 characters)	Code	Title (limit 25 characters)	From	To	From	To	From	To	
Abolished LTC Class														
F			X	D7D4XX	Transportation Maint IV		Abolish - vacant	LTC						7/1/02
Abolished ASR Class														
F			X	G3C1IX	Library Technician Intern		Abolish - vacant	ASR						11/01/01
ASR Pay Grade Changes														
F		X		G3C2TX	Library Technician I	G3C2TX	Library Technician I	ASR	ASR	G29	G34	1	1	7/1/02
F		X		G3C3XX	Library Technician II	G3C3XX	Library Technician II	ASR	ASR	G35	G38	1	1	7/1/02
Abolished PS Classes														
F			X	H3B1XX	Broadcast Specialist I		Abolish - vacant	PS						7/1/02
F			X	H3B2XX	Broadcast Specialist II		Abolish - vacant	PS						7/1/02
F			X	H4Q5XX	Port of Entry IV		Abolish - vacant	PS						7/1/02
F			X	H5F4XX	Hearings Officer IV		Abolish - vacant	PS						7/1/02
New PSE Classes														
F	X					I1B1TX	Statistical Analyst I	PSE	PSE	I23	I23	0	0	7/1/02
F	X					I1B2XX	Statistical Analyst II	PSE	PSE	I30	I30	0	0	7/1/02
F	X					I1B3XX	Statistical Analyst III	PSE	PSE	I39	I39	0	0	7/1/02
F	X					I1B4XX	Statistical Analyst IV	PSE	PSE	I43	I43	0	0	7/1/02
Converted/Revised PSE Classes														
F		X		I1B1T*	Statistical Analyst I	I1B1TX	Statistical Analyst I	PSE	PSE	I23	I23	0	0	7/1/02
F		X		I1B2**	Statistical Analyst II	I1B2XX	Statistical Analyst II	PSE	PSE	I30	I30	0	0	7/1/02
F		X		I1B3**	Statistical Analyst III	I1B3XX	Statistical Analyst III	PSE	PSE	I39	I39	0	0	7/1/02

P or F*	CD Changes			Current Class		New Class		Occ Grp		Grade		Pay Diff.		Effective Date
	New	Rev	Abol	Code	Title (limit 25 characters)	Code	Title (limit 25 characters)	From	To	From	To	From	To	
F		X		I1B4**	Statistical Analyst IV	I1B4XX	Statistical Analyst IV	PSE	PSE	I43	I43	0	0	7/1/02
F		X		I2C1I*	Engineer Intern	I2C1I*	Engineer-in-Training I	PSE	PSE	I25	I25	0	0	7/1/02
F		X		I2C2T*	Engineer-in-Training I	I2C2T*	Engineer-in-Training II	PSE	PSE	I30	I30	0	0	7/1/02
F		X		I2C3**	Engineer-in-Training II	I2C3**	Engineer-in-Training III	PSE	PSE	I34	I34	0	0	7/1/02
F		X		I5B2TX	Biomedical Equip Tech I	I5E3XX	Electronics Spec II	PSE	PSE	I22	I22	1	1	7/1/02
F		X		I5B3XX	Biomedical Equip Tech II	I5E4XX	Electronics Spec III	PSE	PSE	I26	I28	0	0	7/1/02
F		X		I5B4XX	Biomedical Equip Tech III	I5E5XX	Electronics Spec IV	PSE	PSE	I32	I34	0	0	7/1/02
F		X		I5E1IX	Telecomm/Elec Spec Intern	I5E1IX	Electronics Spec Intern	PSE	PSE	I10	I10	1	1	7/1/02
F		X		I5E2TX	Telecomm/Elec Spec I	I5E2TX	Electronics Spec I	PSE	PSE	I16	I16	1	1	7/1/02
F		X		I5E3XX	Telecomm/Elec Spec II	I5E3XX	Electronics Spec II	PSE	PSE	I22	I22	1	1	7/1/02
F		X		I5E4XX	Telecomm/Elec Spec III	I5E4XX	Electronics Spec III	PSE	PSE	I28	I28	0	0	7/1/02
F		X		I5E5XX	Telecomm/Elec Spec IV	I5E5XX	Electronics Spec IV	PSE	PSE	I34	I34	0	0	7/1/02
Abolished PSE Classes														
F			X	I1B1T*	Statistical Analyst I		Abolish - converted							7/1/02
F			X	I1B2**	Statistical Analyst II		Abolish - converted							7/1/02
F			X	I1B3**	Statistical Analyst III		Abolish - converted							7/1/02
F			x	I1B4**	Statistical Analyst IV		Abolish - converted							7/1/02
F			X	I5B2TX	Biomedical Equip Tech I		Abolish - converted							7/1/02
F			X	I5B3XX	Biomedical Equip Tech II		Abolish - converted							7/1/02
F			X	I5B4XX	Biomedical Equip Tech III		Abolish - converted							7/1/02

P or F*	CD Changes			Current Class		New Class		Occ Grp		Grade		Pay Diff.		Effective Date
	New	Rev	Abol	Code	Title (limit 25 characters)	Code	Title (limit 25 characters)	From	To	From	To	From	To	
New Teacher Classes														
F	X					J2B1TX	Child Care Aide	HCS	T	C17	J11	1	1	7/1/02
F	X					J2B2XX	Early Childhood Educator I	HCS	T	C21	J15	1	1	7/1/02
F	X					J2B3XX	Early Childhood Educator II	HCS	T	C25	J19	1	1	7/1/02

* For the A3C1TX class, grade A92 is the consolidated pay grade for grades A23, A27 and A33. There is no change in the salary amounts included in A92.

NOTE: Please note that the pay differential for the following HCS classes has changed: Developmental Disability Aide (C1D1), Developmental Disability Tech I (C1D3), Special Education Tech I (C1G1), Special Education Tech IV (C1G4), Audiology -Speech/Language Specialist II-IV (C2A2-4), Pharmacy Inspector I & II (C2G1-2), Primary Care Supervisor (C2L1), Dental Lab Technician I-II (G3G1-2), Respiratory Therapy Technician (C3M1), Histology Technician II (C4A2), Laboratory Technician II (C4B6), Psychiatric Care Technician I (C5F2), Social Work Associate/Intern (C5H1) and Clinical Nurse Specialist (C6J1). All positions that were previously approved as eligible for pay differentials will remain approved. Agencies that create positions in these new classes in the future will need to obtain approval for pay differentials on a position-by-position basis, in accordance with Director's Administrative Procedures.

ISSUING AUTHORITY: Colorado Department of Personnel & Administration Revised 01/02



SYSTEM MAINTENANCE STUDY

NARRATIVE REPORT -- FINAL CHANGES

ENFORCEMENT & PROTECTIVE SERVICES CONSOLIDATION STUDY

Class Code A1A1XX through A9A3XX

Conducted Fiscal Year 2002-2003

BACKGROUND AND PURPOSE OF STUDY

This system-wide study is part of the Department of Personnel and Administration's (hereafter "the department") statutory responsibility, CRS 24-50-104(1)(b), for maintaining and revising the system of classes covering all positions in the state personnel system. Such maintenance may include the assignment of appropriate pay grades that reflect prevailing wage as mandated by CRS 24-50-104(1)(a). The state personnel director has delegated authority for system studies to the Division of Human Resources (hereafter "the division"). This study concerned the classes in the Enforcement and Protective Services (EPS) occupational group.

This study was initiated for several reasons: one, this occupational group had not been studied for further consolidation following the 1993-95 Job Evaluation System Redesign Project; two, requests had been received to review the occupational group definition for possible inclusion of non-peace officer classes; three, the peace officer requirement was missing from the class description for the Criminal Investigator series; four, some classes' pay grades were out of alignment with the prevailing labor market; and, five, the Department of Corrections had decided to consolidate two divisions (Community Corrections and Parole) that drove the need to collapse two class series into one describing jobs with both types of responsibilities.

METHODOLOGY

Based on the above needs for the study, the responsible occupational specialist proposed that it be included in the team work plan for the 02-03 fiscal year. Following management approval of the work plan, this study was included in the list of studies to be completed this fiscal year. The

conduct of the study followed the Guide to the System Maintenance Study Process established by the division and published on its web site. Individual placement of positions was not a purpose of the study, hence Position Description Questionnaires (PDQs) were not collected and evaluated, except for the special review of specific positions at the Colorado Mental Health Institute at Pueblo (CMHI-P) to deal with the work duties of the forensic psychiatric technicians at that facility.

The list of all system maintenance studies was formally announced via email to all agency HR administrators and placed on the division's web site during August 2001. Study team members were recruited at the same time. Criteria for selecting a study team member included being well versed in the system's principles, structure, and factors; having the ability to think conceptually and creatively; possessing the ability to devote the necessary time and energy required; and being able to take an active role in explaining and defending the study and its outcomes.

From the volunteers for the study, the study team leader selected representatives from the departments of Human Services, Revenue, Regulatory Agencies, Corrections, Public Safety, and representatives from the higher education institutions of Colorado State University, Auraria Higher Education Center, and the University of Colorado - Boulder. These study team members represented the major groups of positions in this occupational group. Additionally, a study co-leader and representatives from the Total Compensation Unit and the Workforce Staffing Unit from the division joined the study group.

The study team was first assembled on October 25, 2001, when the objectives and process for the study were reviewed with study team members. The primary study objectives were:

- Consolidate classes where appropriate.
- Validate use and need for classes and concepts.
- Validate minimum qualifications and competencies.
- Review the pay structure, prevailing market, and practices.
- Facilitate integration into performance based pay.

Review of class structure and issues

Initially, the study team reviewed each class in this occupational group and the definition of the group. The EPS occupational group consisted of 61 classes grouped into 16 separate series. The class series ranged from six classes in several series to one class in one series. The largest class was Correctional Officer I with over 2400 positions down to one position in the Assistant Chief, Wildlife Law Enforcement class. The total number of positions in this group was approximately 5508 (not including positions at Colorado State University and the University of Colorado system) at the start of the study -- this represented approximately 20.7% of the total workforce.

The study team developed the study plan and the communications plan to guide its actions throughout the process. These would be modified as the study progressed when needed. The goal was to have the study completed by late spring 2002 so that Phase I could be implemented on July 1, 2002. Final implementation of those changes having a fiscal impact would occur the following July 2003. The study plan included phases for fact finding, discussion with subject matter experts, on-site visits if necessary, open forums to gather inputs and explain the study,

team analysis of issues and decision making, review and finalization of compensation issues by the Total Compensation Unit, proposal of the study recommendations, conduct meet and confers, followed by final publication of the results of the study. The following paragraphs of this narrative outline the issues and final recommendations of the study team and the department.

ISSUES AND FINDINGS

Definition of occupational group

The study group reviewed the definition of the EPS occupational group. This was primarily done in response to requests to expand this definition beyond its present scope. The existing definition is:

These occupations perform services where Peace Officer Level I or Level II status is granted by statute with the authority and duty to enforce criminal laws and are responsible for the prevention, detection, and investigation of crime. This group is concerned with the protection of persons and property against loss, injury, or disturbance resulting from criminal acts, accidents, and other hazards. Training and skill in the use of weapons is required, as is the periodic qualification with such weapons. Employees must satisfy requirements set forth in statute to carry out their commission and duties, and generally require certification by the Peace Officers Standards and Training Board. Included are supervisors and administrators.

NOTE: Occupations performing inspection or regulatory functions for the purpose of maintaining compliance with technical or professional standards, specifications, contracts, or civil code are not included in this occupational grouping. Such occupations are best evaluated in the families containing their specific professions.

Two agencies employing Police Communications Technicians (law enforcement dispatchers) had requested that the department allow these classes to be placed in the EPS occupational group. The justification presented was that since positions in these classes are in direct support of law enforcement, communicate with them on a continual basis, and their jobs are directly connected to law enforcement jobs, they should be recognized in this occupational group. The agencies also reported difficulties in recruiting and retaining employees in this class series.

The study team reviewed the background for the establishment of the occupational groups in 1986-7 and the Director's Decisions on appeals from those groupings. It found that the same issue was addressed at that time and the Director had reviewed the evidence and made a decision. The decision was that the EPS occupational group definition included the requirement that positions and classes in the group must have Peace Officer level I, Ia, or II authority granted by statute. Because the communications technicians (and other similarly situated classes) did not have this peace officer status, they could not be placed in the EPS Group.

The study team reviewed the situation once more and found that the Police Communications Technicians still did not have peace officer authority and that their claims were identical to those presented to the Director in 1987. The study team considered expanding the occupational group definition, but decided against it because the peace officer requirement preserved the law

enforcement integrity of the group and expanding the definition to other levels of peace officer authority or non-peace officers would dilute this integrity. They further determined that any expansion would make it much more difficult to determine which classes or positions belonged in that group and which did not. The team noted that other positions have similar working relationships with police officers and troopers similar to the communication technicians and, if the definition was expanded, one distinctive determinant could not be identified that would equitably distinguish between classes or positions in or out of this occupational group. The study team concurred with the 1987 Director's Decision that the occupational group definition should not be expanded to include classes or positions beyond the Peace Officer level I, Ia, or II currently placed in this group.

Because of prevailing market pay issues with one class of the Police Communications Technician series, the recruiting and retention issues were transferred to another system maintenance study conducted specifically on that class series. Those results are published in a separate document available from the department.

The study team further reviewed the occupational group definition and discovered that some minor rewording needed to be made as follows:

*These occupations perform services where Peace Officer Level I or Level II status is granted by statute with the authority and duty to enforce criminal laws and are responsible for the prevention, detection, and investigation of crime. This group is concerned with the protection of persons and property against loss, injury, or disturbance resulting from criminal acts, accidents, and other hazards. Training and skill in the use of weapons are **typically** required, as is the periodic qualification with such weapons. Employees must satisfy requirements set forth in statute to carry out their commission and duties, and ~~generally~~ **may** require certification by the Peace Officers Standards and Training Board. Included are supervisors and administrators.*

NOTE: Occupations performing inspection or regulatory functions for the purpose of maintaining compliance with technical or professional standards, specifications, contracts, or civil code are not included in this occupational grouping. Such occupations are best evaluated in the families containing their specific professions.

These two changes better reflect actual work requirements. Not all peace officers are required to carry and be trained with weapons or certified by the Peace Officer Standards and Training Board (POST). For example, agents in the laboratory at the Colorado Bureau of Investigation (CBI) do not need to carry weapons nor be POST certified to carry out their duties. Also, positions in the Department of Corrections (DOC) are trained in their own academy and do not need POST certification. Therefore, the above changes are recommended.

Corrections Case Manager series

This series consists of three classes, full operating, work leader, and supervisor, and is used exclusively by the Department of Corrections to manage caseloads of offenders while incarcerated. Some minor suggestions were received by the study team during the open forums on these classes. They included the need for more personal computer training, added duties for

oversight of offenders in private facilities, differences between positions at Headquarters DOC in offender management, and clinical assessment positions at the Denver Reception and Diagnostic Center (DRDC). The study team reviewed these suggestions and found that all are either issues better handled internally by DOC or do not fit the concept for the Case Manager series. The study group concurred that the assessment positions at DRDC are not case managers as they only have contact with offenders for short periods of time while they are being processed into the system and do not continue to manage them once they leave DRDC.

The study team recognized the difference between case management in individual prison facilities and those at central headquarters, but judged them to be sufficiently related to be kept in this broad class concept. While the positions at headquarters do have a much more global perspective for managing all offenders in the system, they still must understand and track the progress of individual offender cases as they are moved within the prison system. While the work between these positions and facility case managers with an assigned caseload may be somewhat different, they both continue to fit this broad class concept.

The study team reviewed the feasibility of consolidating this series with others in this occupational group. They found that while the pay grades may be similar to other correctional classes, the type of work and the factor combinations are not compatible with other corrections classes. The study team agreed that any attempt to collapse the case managers into other corrections classes would be confusing and arbitrary and could not reasonably be justified.

Other than updating some language in the class series, there are no changes recommended for the Corrections Case Manager class series. The Total Compensation Unit reviewed the pay grades for these classes and found that no change was justified. Historically, the pay grades for the Case Manager I and III have been directly related (comparable) to the Correctional Officer III and IV classes respectively. The Case Manager II class pay grade was placed partway between the other two. Since there were no pay grade changes justified for the Correctional Officer III and IV classes, no changes to the case managers are recommended.

Correctional Officer series

This class series consists of six classes and follows a traditional hierarchy of full operating, work lead, first supervisor, second supervisor, and third supervisor (manager) sequence. A separate intern class is only used by the Division of Youth Corrections within Human Services. This series has been used by both the Department of Corrections for adult and some youth offenders and is used by the Division of Youth Corrections in their detention centers throughout the state. The CMHI-P also uses the lower levels for its forensic security units.

During the open forums, only three issues were identified: one, some "blurring" of movement from the I to the II class has occurred in some prison facilities; a rumor existed that the II class would be abolished; and an equity issue for psychiatric technicians at CMHI-P who have been assigned more security and control duties, but paid at the lower pay scale of Health Care Technicians. The study group reviewed the claimed "blurring" of positions in the I and II classes. Based on information from the DOC representative on the study, the team determined that the factors are distinct between the two classes in the class description and further

clarification to the concepts was unnecessary. They decided that this was an internal DOC issue that needed to be addressed by human resources and managers in that department to keep positions properly placed in the appropriate class. Apparently, reorganizations within DOC where lead work was removed from positions did not result in the II positions being reviewed for subsequent proper allocation. That resulted in two or more positions being placed in the lead work class (Corrections Officer II) and one or more of them not having actual lead work duties. The study group recommends that DOC address these issues as they are outside the scope of this study.

The study group found no basis for the claim that there was an effort to abolish the II class and recognizes that as an unfounded rumor. While unfortunate, this incident did bring to light the value of open forums to validate what the study objectives are and are not. They are also a valuable communication tool to help employees statewide understand the role and purpose of system maintenance studies.

The equity issue of the psychiatric technicians at CMHI-P was found to be much more extensive than originally thought. Discussions with the Department of Human Services study team member and HR specialists at CMHI-P revealed that a group of employees in the forensic psychiatric units had hired a lobbyist and that two legislators were interested in pursuing a statutory solution to the perceived pay inequity with this type of position. This situation was exacerbated by the concurrent escalation of health care premiums for Pueblo County. The issue evolved from psychiatric technicians (recently consolidated into Health Care Technician I) being assigned more and more physical security duties to protect the staff and facility from out-of-control mental patients in several high security treatment units at CMHI-P. These duties were previously performed by Correctional/Security Services Officer Is who had responsibility for the internal and external security of these forensic units. Due to several injuries to staff within the units, CMHI-P's management review showed that proper security could best be provided by personnel working in the unit with much faster response times than the Correctional Officers on the exterior of the units. CMHI-P management decided that the internal psychiatric technicians could best be trained and assigned these security duties. However, the pay for these psychiatric technicians was approximately 37% lower than Corrections Officer Is.

The study group met with representatives of CMHI-P to explore the issues and potential solutions. Following that initial meeting, CMHI-P was asked to formally study two potential solutions and report back to the study team several weeks later. The two alternatives were to either use another existing class, the Health Care Technician III or Correctional/Security Services Officer I, or to develop a new class series within the Health Care Services occupational group to accommodate this need. The occupational specialist leading the study team worked with the lobbyist and the two legislators to persuade them to withhold any further action until the department had time to try to reach an acceptable solution.

The CMHI-P HR representative and two forensic security subject matter experts (SMEs) reported back to the study team with the results of their analysis of the alternatives. Their report proposed that the department create a new "Clinical Security Officer" class series of three levels to focus on the heavy security duties of psychiatric technicians in some of the units at CMHI-P. Not all psychiatric technicians at CMHI-P would be placed in this new class series as not all of

them have the heavy security duties. They proposed this new class series as best meeting their needs for the following reasons:

- This series would recognize both the security duties and the psychiatric technician certification requirements whereas none of the existing classes could offer this capability.
- It would provide a distinct career path for these types of positions.
- It would be placed in the Health Care Services (HCS) occupational group but still have the security authority (peace officer) to be used potentially as legal sanctions against unruly clients. (Assault on a peace officer is considered a felony.)
- Positions in this new class would not be perceived as "prison guards" which might suggest the wrong focus in a health care treatment setting and possibly raise concerns with national standard setting agencies, i.e., JCAHO - HICFA.
- Recruiting of new hires would be easier when not associated with "corrections guards."

After lengthy discussion and analysis of pros and cons, the study team concluded that the use of the existing Correctional/Security Services Officer class series would meet the basic needs of CMHI-P. While not an ideal solution, it did conform to the prime objective of this study in consolidating classes into even broader class concepts, rather than creating new, narrower concept classes. The study group recommended that the class title and class description of work for the Correctional/Security Services Officer series be expanded to accommodate their need. The use of working titles for positions and in announcements for hiring would alleviate the concerns about the "prison guard" perception by others. These working titles would also help alleviate some of the concern about accreditation reviews by JCAHO. The study team believed it would be difficult to justify placing a peace officer class in the HCS occupational group if a new series was created. The study team also believed it practical to modify the existing minimum qualifications for the corrections classes to accommodate the certification requirement of these forensic psychiatric technician positions. The study team also noted that a similar situation occurred in 1993 when the Youth Corrections' Youth Service Workers were consolidated with the Corrections classes and this arrangement has been working satisfactorily for Youth Corrections since that time.

One question arose on what is the basis for the peace officer authority of these types of positions at CMHI-P. Similar to the authority granted to security officers employed by CMHI-P for external ward security, the authority granted by C.R.S.18-1-901 and 24-7-101 cover these psychiatric technicians. A primary function of these psychiatric technician jobs is the security of the resources of CMHI-P while still performing treatment functions for patients.

The study team representative from the Total Compensation Unit searched for relevant salary data to apply to this type of work. The Central States Compensation Association had reported in its annual survey of salaries for 22 western states about a similar class of work. Upon verification of class concepts from the reporting states, a salary relationship was established that showed that an appropriate pay grade for this forensic psychiatric technician work was closer to Colorado's Correctional Officer I class than the alternate Health Care Technician III class. This further validated the study team's decision to modify the class concept of Correctional/Security Services Officer series to accommodate the forensic psychiatric technicians.

In conclusion, the study team recommends that the title and class concept for the existing Correctional/Security Services Officer series be expanded to include the forensic psychiatric technician work. The new class series title will be Correctional, Youth, & Clinical Security Officers.

Cost issues: One further hurdle with this issue will be the cost associated with moving these forensic psychiatric technicians in some of CMHI-P's units to the higher class and pay grade. CMHI-P staff estimated that the first year cost would be approximately \$20,491 per month for about 80 positions. Given the current budget shortfalls and expected revenue limits, the Department of Human Services may have to obtain special budgetary authority to fund these increases. The department will support them in this legislative effort. The study team also recommended that CMHI-P pursue a multi-step phase in.

Salary review

The study team co-leaders and the Total Compensation Unit reviewed the salary levels for these classes. Salary data for the last several years was available for the Correctional Officer I class. While the market data shows the state lagging behind three years ago, the most recent data shows that we are within two percent and drawing closer to the market. Hence, there is no justification to adjust the pay grade for this class.

No market data were available for the remaining classes in this series. Historically, the upper classes have been adjusted based on changes to the Correctional Officer I class; therefore, since that class pay grade is not changing, no changes in pay grade for the other classes in the series are recommended.

Correctional Support Supervisors series

This group of classes consists of five separate series with three or four classes in each. These classes are conceptually mixed with the primary focus being a trade function and a strong secondary function being correctional in nature. As supervisory positions in DOC, these positions have peace officer authority and belong in EPS. Due to these mixed assignments, the historical practice since 1993 has been that these classes' pay grades would be set at the higher of either their respective trade occupation or their correctional duties. Two of the series, electrical and pipes, had pay grades representative of their corresponding Labor, Trades, & Crafts (LTC) occupations since those are highly skilled and are typically licensed or certified classes paid higher than the corrections part of these job classes. The other three occupations, food service, general LTC maintenance, and an "other" that included any LTC occupation not included in the first four mentioned, had LTC classes included whose pay was lower than their correctional counterparts. In essence, two of the series had pay grades higher than the correctional counterpart and three of the series had pay equivalent to their correctional counterparts.

The study team evaluated the feasibility of collapsing these five series into two; one, representing the higher paying licensed or certified trades and, the other, representing the trades paid at the correctional equivalent pay grades. All of these classes are supervisory and have

common levels and factor definitions. Previously, the electrician support supervisor classes' pay grades were slightly lower than the pipes trades (plumbers, HVAC, and pipe fitters), but during the LTC Consolidation Study, these two classes in LTC were leveled and their pay grades made equivalent. With the previous practice of paying the Correctional Support Supervisors comparable to their LTC salary levels, these two separate Correctional Support Supervisor series (Electrician and Pipes) should now be equivalent in pay grade. This could either be accomplished by assigning the two separate series the same pay grades, or combining them into one consolidated class. The study team decided that consolidation made the most sense and would ensure future comparability.

Similarly, the other three series were all paid at the equivalent correctional salaries that were higher than their comparable trade class pay grade. The study team decided that these three series could be collapsed into one broad series. It became evident to the study team that it was practical and reasonable to collapse the previous five series into two: one, which describes the highly trained, licensed or certified trades of electricians, plumbers, electronics specialists, HVAC specialists, pipe fitters, etc.; and, two, the other unlicensed trades series covering all the other types of support supervisor positions used in the corrections settings. The consolidation plan is depicted below.

CURRENT		PROPOSED
A1E	Corr'l Support Electrical Supv I, II, III	Corr'l Support Licensed Trades Supervisors
A1H	Corr'l Support Pipes Supv I, II, III	Corr'l Support Licensed Trades Supervisors
A1F	Corr'l Support Food Supv I, II, III, IV	Corr'l Support Trades Supervisors
A1G	Corr'l Support Maint Supv I, II, III	Corr'l Support Trades Supervisors
A1J	Corr'l Support Other Supv I, II, III	Corr'l Support Trades Supervisors

The distinction between the two proposed series becomes the specific trade involved and the licensing or certification requirement for the first series. Typically, all positions in the electrician and pipes classes previously and currently require either a license issued by the state licensing authority, or extensive training and certification in the case of HVAC mechanics. The positions in the other "unlicensed" series typically do not require a license or certification to perform work in their field.

Salary review

The study leader reviewed the salary levels for the classes proposed to be collapsed. As mentioned above, the first two levels of the Correctional Support Electrician Supervisor series were at lower pay grades than the first two levels of the Correctional Support Pipes Supervisor series. Effective 7/1/2000, the LTC Consolidation Study implemented a change in pay grade for the electrician classes which raised them to be equivalent with the pipes classes. Therefore, under the practice of paying the Correctional Support Supervisor classes at least the level of their corresponding LTC pay grade, the Correctional Support Electrician Supervisor I and II class pay grades should have been examined. Knowing that this study was scheduled, the department decided to wait to change the pay grades as part of this study.

Because the LTC study raised the Electrical Trades classes to the market level, the Correctional Support Electrician Supervisor I and II classes should be raised comparably. Both classes are recommended to be raised by one grade (2.5%), which will make them equivalent to their comparable Electrical Trades class. This salary grade increase should occur even if this consolidation did not take place.

As part of the salary analysis, the salary level for the Correctional Support Pipes Supervisor I and II classes were found to be higher than their equivalent LTC occupation. This became a fact because the EPS Occupational Group annual salary adjustments over the past five years have been 3.6% higher than the LTC Occupational Group. This drove the Correctional Support Pipes Supervisor classes above their LTC counterparts. Hence, the pay grade for the Correctional Support Pipes Supervisor I and II classes have risen above their LTC counterparts by two grades and one grade respectively. They are recommended to be lowered accordingly. This adjustment downward is in no way connected to the consolidation of these Pipes classes into the newly proposed Correctional Support Licensed Trades Supervisor series. If this consolidation had not taken place, the Total Compensation Unit would still recommend that these two classes be lowered to make them comparable with their LTC counterparts.

Criminal Investigator series

This series consists of five classes ranging from the intern level up through the second level supervisor. The only change identified for this series is a clarification that peace officer status is required for positions in this class, as this is not stated now. The issue is that the class description itself does not state the level of peace officer status required of positions in the occupational group and its series. The EPS occupational group definition has always required that its classes, and subsequently positions in those classes, maintain statutory peace officer Level I, Ia, or II status. The classes under EPS are primarily concerned with protection of persons and property through the prevention, detection, and investigation of criminal acts. Certification by the Peace Officers Standing and Training Board is frequently required along with training and skill in the use of weapons, including periodic qualification with such weapons, needed to prevent or respond to any escalation of force.

Because of the above requirement for classes in EPS, it was assumed that all users would understand that such requirements would also necessarily extend to all positions in such classes. Without such a requirement, the classes would not be able to remain in EPS and track with law enforcement occupations. Occupational groups are not used directly to allocate individual positions, so not all users were aware of this requirement for EPS classes. A statement will be added to the “Description of Occupational Work” section of the class description to clarify this matter. Because no other issues arose with the Criminal Investigator series, no other change is proposed.

Salary review

The salary levels were reviewed for this series. Only one year of salary survey data was available for review, hence that is inconclusive data to base any valid comparison on. While that information showed the Criminal Investigator II pay to be above the market, additional years of

salary data would be needed before any adjustment could be justified. Historically, without local salary survey data, the Criminal Investigator I class pay grade has been set 27½% above the Police Officer I class. Because no change in pay grade is recommended for the Police Officer I class, this relationship holds that no change to the pay grade of the Criminal Investigator I is necessary. No changes in pay grades are indicated for this series at this time.

Community Programs and Parole series

There are two series in this occupational area: six levels of Community Programs Agent and six identical levels of Parole Officer. Both series have identical levels, factors, and pay grades assigned. Based on a recent reorganization, the Department of Corrections decided to merge the two separate divisions operating these programs and assign both types of duties to positions in the consolidated division. Therefore, they requested that these two series be merged into one series to describe both types of work, which is the Community Parole Officer series. The Department of Corrections (DOC) volunteered to assemble a small study group to draft suggestions for the combined series and update the examples of work for the class description.

The DOC study group presented their findings to the study team. The significant change involved a proposal to combine the previous I and II levels, developmental and full operating, into one broad class with one broad pay grade. The rationale provided was that the type of work did not vary significantly between these two levels and employees moved upwards based on experience and more independence from close supervision. The study team thought the idea had merit as the department has been evaluating broadbanding feasibility for a few years and was pursuing broader classes. This proposal offered an opportunity to move further in that direction. After discussion, the study team proposed that the Department of Corrections expand this broad concept to include the next higher level, the III (lead work) class.

Following internal discussions, the DOC study group felt that it was premature to include the lead work class in the broad class and pay grade, as the lead work positions are all promotional department wide. Broadbanding would dilute that promotional opportunity. Instead, the study team suggested that the Intern class be included in this broadbanding pilot study. DOC concurred that this was feasible and agreed to pursue that concept. Hence the recommended class description for the consolidated series will be titled "Community Parole Officer" and will include one broad class combining the lower three levels, plus the upper three levels similar to the previous concepts. The department will develop the system mechanics for EMPL to accommodate this broad pay grade and an action code to handle the associated "in-grade" salary movements upwards. The pay grade associated with this broad class will range from the minimum of the former Intern class to the maximum of the former full-operating II class. Since all positions can move to the broader pay grade with no change in salary, there is no fiscal impact to this change.

The following depicts the new proposed structure:

Current structure	Proposed structure
Community Programs & Parole Intern Grade A23 \$2734 - \$3836 Community Programs & Parole Officer I Grade A27 \$3016 - \$4228 Community Programs & Parole Officer II Grade A33 \$3489 - \$4895	Community Parole Officer * Grade A92 \$2734 - \$4895
Community Programs & Parole Officer III Grade A35 \$3664 - \$5140	Community Parole Team Leader Grade A35 \$3664 - \$5140
Community Programs Admin I & Parole Supervisor Grade A39 \$4039 - \$5667	Community Parole Supervisor Grade A39 \$4039 - \$5667
Community Programs Admin II & Parole Manager Grade A43 \$4452 - \$6248	Community Parole Manager Grade A43 \$4452 - \$6248

*** Movement within this broad class and pay grade will be based on completing a training outline or similar justification specified by the position's manager or appointing authority. The Department of Corrections may specify additional criteria for movement within this class and pay grade. See the proposed class description for the applicable factors for this class.**

Several other issues were raised during the open forums: offender escapee's cases are turned over to them, why do the Judicial Department Probation Officers get an Intensive Supervision Program (ISP) pay premium, will managers be moved to other class series, and why only a two grade differential between the upper level classes. Turning over case management to positions in this class series is an individual Department of Corrections decision and considered within the scope of their authority for assigning jobs. While some of that work may entail criminal investigation work, it remains a small portion of the total job and would not change the class such positions are placed into. The primary focus of their jobs remains the community parole programs.

In response to why the Judicial Department Probation Officers receive a pay premium for ISP duties, those positions are in a personnel system different from the state personnel system. Hence, they may have differing classes of work and are paid slightly differently. While the state personnel system attempts to pay prevailing base pay, different employers have different premium pay practices. In the Judicial Department's situation, they designate 15-20% of their probation employees to work in the ISP program. These employees receive a 5% pay premium while working in this program due to the higher levels of stress and risk. Each judicial district sets limits on the maximum number of years an individual employee can be assigned this program and receive the pay premium. The maximum statewide is four years, although some districts limit it to two years. The Judicial Department's compensation philosophy is different from ours.

Whether division managers are moved out of the proposed Community Parole Manager class is at the discretion of appointing authorities in the Department of Corrections. Some manager positions may fit the requirements for the Management class in the Professional Services occupational group, but that is an internal decision outside the scope of this study.

The pay grade difference between the Community Parole Team Leader and the next lower level has traditionally been 5% (two pay grades). This is not unusual, particularly in the EPS occupational group. For instance, the difference between the Criminal Investigator III and IV is also two grades; the difference between the State Patrol Administrator I and II is only one pay grade. Analysis shows that if the Community Parole Team Leader pay grade were raised, that would lessen the difference between that class and the next higher level, the supervisor class, which would cause complaints from incumbents in that class. As no pay grade changes are justified for any of these classes, it would be arbitrary to change one of them just to increase the differential between two classes and reduce it between two other classes.

Salary review

Only one source of local salary information was obtained during the last salary survey cycle and it was contained in the MSEC Public Sector Survey for probation officers. Since that is a new survey and only one year's data was available, it is premature to make any definitive salary adjustment. Similar to the previous salary review of the parole classes in a 1993 national survey of other states, the department's compensation staff compared the salary relationship between a fully operational parole officer and a fully operational correctional officer in data provided by 22 states participating in the 2001 Central States Compensation Association salary survey. That comparison showed that, on average, fully operational parole officers are paid approximately 28% more than fully operational correctional officers. Colorado presently pays them 31% more, which is close enough based on the smaller sample this year than that used in 1993. Therefore, no change in pay grades for the fully operational Parole and Community Programs classes are justified. Because the other classes in this series are based on the fully operational level on a plus-or-minus percentage basis, there are no changes indicated for the other classes in these series.

State Patrol and Police Officer series

State Patrol

Since this class series was just updated and pay was increased significantly in accordance with statutory changes made in 2000, no changes are recommended for the classes or pay grades. Some minor titling changes were added to better distinguish this series from parole classes; i.e., the Trooper will be titled State Patrol Trooper, the Trooper III will be titled State Patrol Trooper III, the Patrol Supervisor class will be titled State Patrol Supervisor, and the Patrol Administrator I and II classes will be titled State Patrol Administrator I and II respectively.

Salary Review

Because the State Patrol series pay grades were realigned with the new statutory guidelines in 2000, no changes are recommended. The pay grades continue to meet the market as defined in statute.

Police Officer classes

This class series consists of six classes from the intern level up through the second administrator level. These are the law enforcement entities at the colleges and universities and CMHI-P. They have cooperative agreements with the local city police departments on separation of authority and some sharing of resources. The positions in these classes are POST certified. The issues raised during this study were generally recruiting and retention problems in some units and dissatisfaction with the salary levels, given the significant pay raises provided to State Patrol Troopers by the special legislation in 2000.

The study team's review of the concepts, levels, and factors in the class description revealed no significant changes needed. Some rewording of the minimum qualifications was suggested for consistency purposes to pattern other classes. On the problems of recruiting and retention reported in April 2001, six of the eleven using agencies submitted data on recruiting and retention for the previous 18-month period. This had followed several contacts with the department expressing increasing difficulties in these areas, particularly in the Police Officer I class. An analysis of the data submitted showed that the issues were concentrated in the Denver, Boulder, and Fort Collins areas. Their losses were significantly higher (one experienced an 18% turnover in one eighteen-month period) and they had greater difficulty in recruiting, partially attributed to non-competitive salaries. On the other hand, those agencies outside this north-central area reported little or no difficulty in retaining or recruiting officers. Hence, the difficulties vary by their location and the conclusion is that the difficulties are directly related to the competition from other law enforcement agencies. Since the Denver-Metro area typically has the higher salaries in the competing police departments, those state agencies located nearby realize the greater difficulties.

Because the state is unable to increase the salaries for the Police Officer I class, as will be discussed below, and the fact that geographic pay is not permitted by the State Constitution, increased pay grades are not feasible. Individual colleges and universities have the capability to make some adjustments to individual employees' pay through the department's discretionary pay differentials. Provisions such as matching pay are available to management to ease pay issues when funds are available.

One additional request that was raised during the open forums was that the study team review the levels of benefits and premium pays offered by law enforcement agencies in the market. Because the department is investigating these other benefits and pays from a total personnel system perspective during the 2003 Annual Total Compensation Survey, that request is deferred to that separate effort. The results will be included in the report that covers that system analysis on market valuation of other benefits.

Salary review

The study team leader and compensation staff reviewed the salary data available for these classes. Comprehensive salary data is available for almost all of the city and county law enforcement agencies in the 20 county Front Range area, which is the primary survey market for pay purposes. For the last several years, the annual salary survey adjustments have kept the Police Officer I class very close to the prevailing market, within 2½ percent. No change in grade for the Police Officer I class is justified. Similarly, no change is recommended for the Intern class.

No salary data is available for the Police Officer II class, but ample data is available for the upper three classes, the Police Officer III and the Police Administrator I and II classes. That data shows a consistent under-market condition for all three classes for the last three years. That data show that the Police Officer III pay grade should be raised one grade, the Police Administrator I class by two grades, and the Police Administrator II class by one grade to bring them in line with the prevailing market salaries. In order to properly maintain the Police Officer II class between the I and III classes, the II class should also be raised one grade. This will maintain the pay relationship of the II class at 17½ percent below the III class. Because these pay grade changes have a fiscal impact, implementation will not occur until July 2003.

General EPS series

Safety/Security Officers

This class series consists of two classes, a full operating and a first level supervisor, providing security for institutions not needing a full law enforcement capability. These positions have peace officer authority but are not POST certified. By agreement with the local law enforcement entity, they provide limited services to their facilities and grounds. Presently, this class is only used at Fort Logan. The concept of class and the two levels are appropriate for the foreseeable needs of Fort Logan. The Department of Human Services requested that the study team consider creating one higher level for the director or chief of this unit to address higher programmatic and budgetary responsibilities not presently included in the Safety/Security III class. The present incumbent is in the Police Officer series as the incumbent was POST certified when hired for this position.

The study team decided it could not justify the creation of a new class to accommodate one position. Based on the programmatic and budgetary duties, the General Professional series could be used to fill such a position using position-specific minimum qualifications. Given that alternatives are available for this job, the study team recommends not creating another level in this series.

Salary review

The salary levels for the Safety/Security Officer I class are set based on the pay grade for the Police Officer I class. Since that class is not changing pay grade, no changes are recommended. For the Safety/Security Officer III class, limited local survey data is available that shows this

class to be under the prevailing market. Additionally, its pay grade is secondarily related to the Police Officer III class, whose pay grade is being recommended for an increase of 5%. Due to these facts, the Total Compensation Unit recommended that this class be raised three grades to bring it back in line with the prevailing market. Because this change may have a fiscal impact, it will not be implemented until July 2003.

Air National Guard (ANG) Patrol Officers

This series consists of three classes, the fully operational, the work leader, and the first level supervisor. These positions are only used by the ANG unit at Greeley and consist of a total of nine positions among the three classes. They are essentially armed security guards used to provide security for classified equipment and facilities and the people requiring access to those facilities. The use of the series has dropped significantly with the abolishment of the positions at Buckley ANG Base, but the Greeley ANG unit still needs to retain use of this series. The levels and factors remain appropriate for the class. No changes in concept or the class description are recommended.

Salary review

The limited salary survey data indicates the ANG Patrol Officer I class is close to the market for jobs similar to it. There were no salary data for the higher-level classes. One comment received during the open forums was that one incumbent felt that because of the high level of security classification of the physical assets protected, that the positions should be paid more. The study leader researched this topic but could find no precedence for this practice, either in the private sector or active military forces. The most common practice is that the higher level assets are protected by the more experienced and higher trained positions, but the pay structures are not separated based on the level of security classifications protected. Therefore, no change in pay grades is recommended for this series.

Assistant Chief, Wildlife Law Enforcement

This class describes one position in the Division of Wildlife. Its class concept and pay grade are very similar to the Criminal Investigator II class and the study team recommends that this class be consolidated into the Criminal Investigator II class. The existing class concept and factors for that class adequately describe positions such as the assistant chief work; hence, there is little impact by consolidating the class. The Department of Natural Resources has been aware for some time that this was likely and does not oppose such action. The existing position will be converted into the Criminal Investigator II class; then the Assistant Chief, Wildlife Law Enforcement class will be abolished.

MEET AND CONFER ON PROPOSED RESULTS

CRS 24-50-104(1)(b) requires the department to meet and confer with affected employees and employee organizations, if requested, regarding the proposed changes before they are implemented as final. In an effort to proactively facilitate this process, public meet and confer meetings were scheduled for the following dates, times, and locations:

Monday May 13: Front Range Community College, Westminster, room C0501, 1:30 pm.

Tuesday, May 14: Limon Correctional Facility Visitors' Room, 1:30 pm.

Thursday, May 16: Ft. Logan Auditorium, 10:00 am.

Friday, May 17: Corrections Training Academy, Canon City, 10:00 am and 1:00 pm.

Monday, May 20: Grand Junction Rgn'l Ctr, Amos Trng Ctr., Palisade Rm., 11:30 am.

In order to meet the deadline for implementing these changes July 1, 2002, all inputs under the meet and confer must have been received no later than Wednesday, May 22nd.

Summary of Meet and Confers

A total of 45 employees attended the six Meet and Confer sessions with an additional 23 human resource specialists attending including several study team members. Most of the questions posed during these sessions concerned clarifications on the study processes and timelines. The additional comments and inputs received on the proposed changes were primarily in two areas: criminal investigations versus compliance investigations; and how the broadened Community Parole Officer class would work for employees in this class. One issue on converting the Assistant Chief, Wildlife Law Enforcement class into the Criminal Investigator II class was really an individual allocation issue within the purview of the Department of Natural Resources and outside the scope of this study.

On the continuing issue of criminal investigations versus compliance investigations, the Department of Regulatory Agencies (DORA) questioned the need for the explicit statement on peace officer status being recommended for the Criminal Investigator class series and offered alternative language. As explained in the proposed study narrative, see page 10 of this document, this statement is added so that it is clear to all users of the requirement that positions in this class series possess such peace officer authority. The study team leader met with representatives of the Securities Division of DORA to clarify the department's position that the added statement is merely a clarification of its original intent for the Criminal Investigator class series. Since the definition of the EPS occupational group has included this peace officer requirement since 1987, that same requirement existed for all classes within this group. The DORA representatives pointed out statutory language that gives them criminal justice authority for investigating cases. Given that statutory authority, this department is unable to decide the legal issue of that "equivalency" to peace officer status; hence, DORA may seek its own legal advice and continue to allocate its positions accordingly. Similar issues may exist in other departments as well.

The department is continuing to place the peace officer statement in the class description for the Criminal Investigators. Individual departments may allocate positions into these classes based on their own judgment and legal advice.

Several employees questioned the use of the broadened Community Parole Officer class, which is a consolidation of the three previous intern, developmental, and full-operating classes in the two prior series. Most of the questions dealt with unfamiliarity with the concept of using such broad classes and on any specific DOC requirements for movements up in the salary range. The study team leader clarified the intent of the broad class as it eliminates the need for revised PDQs, position announcements, applications, and exams, and replaces those with a simple salary movement upwards within the broader pay range. DOC and the community parole division managers are in the process of establishing their internal controls and processes and they will clarify these with employees and supervisors in the near future. No further changes are being made to the proposed classes.

Two community parole employees expressed concern that supervisors would no longer move them from one class to the next at the same intervals as past practices. They felt the elimination of separate classes removes some of the "guarantee" that these movements would happen. It was pointed out that the same managerial discretion exists under both processes, but the new process is simpler and requires less paperwork and HR time and effort. Some of this fear may be due to the mere fact that it is a change from prior practices. The employees were urged to discuss their concerns with their supervisors and managers.

One other recommendation was offered by HR representatives of the Department of Human Services that, in the future, implementation of new consolidated classes that have new pay grades should all be implemented on a common date. The prior practice of implementing new consolidated classes one year followed by the pay grade changes the next year creates a lot of confusion among managers and employees. The department will attempt to meet this request for future consolidations.

In conclusion, this study recommends the above changes that will result in a total of 10 series divided into 43 classes. Since several of the EPS classes are recommended to increase in pay grade, that action will have a fiscal impact. This impact will be reported in the final narrative for Phase II of this study and will be included in the 2003 Total Compensation Survey Report to be published August 1, 2002. Those pay grade changes will be implemented on July 1, 2003, following legislative review.

RECOMMENDATIONS

I. Occupational Group

These classes remain in the Enforcement and Protective Services occupational group. Two wording changes for the definition of the group are recommended as outlined on page 4 of this report.

II. Class Descriptions

See the attached class descriptions for those effective 7/1/02. The Correctional Support Licensed Trades Supervisor series (A1K1-3), the Police Officer series (A4B1-6), and the

Safety/Security Officer series (A4C1-3) class descriptions will be published for final implementation on 7/1/03 when their new pay grades are also implemented.

III. Class Conversion and/or Placement

Class conversion is the movement from the former class title and grade to a new class title and grade for purposes of future reinstatement and retention. It is used for those studies that do not involve class placement. Positions in the three Correctional Support Supervisor series (Food, Maintenance, and Other) will be converted to the new Correctional Support Trades Supervisor classes and positions in the two Community Programs and Parole series will be converted to the new single Community Parole Officer series in accordance with the chart shown at the beginning of this JEL letter. The one position and the class of the Assistant Chief, Wildlife Law Enforcement will be converted to the Criminal Investigator II class. There are no placements as part of this study.



STATE OF COLORADO

CLASS SERIES DESCRIPTION

July 1, 2002

CORRECTIONS CASE MANAGER

A1A1TX TO A1A3XX

DESCRIPTION OF OCCUPATIONAL WORK

This class series uses three levels in the Enforcement and Protective Services occupational group and describes case management work in monitoring and guiding offenders' progress while confined in a state facility. Case managers provide individual counseling, guidance, and progress assessment; submit community referrals; determine custody levels; assist in pre-release preparations; initiate parole plans; complete parole board risk assessments; determine earned time grants; resolve disagreements between offenders and correctional or judicial entities; perform public relations work with external agencies and the general public; or, supervise such positions. Some positions provide population management services to the agency which involves oversight/direction on offender classification, case management, movement, and disciplinary systems. Although two of the three classes are primarily oriented to counseling and evaluation of offenders, the work includes ongoing responsibility for the security, restraint, and confinement of offenders. Those positions have authority as peace officers to enforce criminal and civil laws and to physically detain or restrain others. Basic peace officer level definitions are found in C.R.S. 18-1-901, with specific authorities found in agency supporting statutes or appointing authorities' delegations.

INDEX: The Case Manager I class begins on this page, the Case Manager II class begins on page 3, and the Case Manager III class begins on page 5.

CORRECTIONS CASE MANAGER I

A1A1TX

CONCEPT OF CLASS

This class describes the fully-operational case manager. Positions in this class provide offenders with counseling and guidance in order to determine the appropriate custody level and facility placement; conduct progress assessments; resolve disagreements; coordinate offender access to work, educational, treatment, and recreational programs; determine earned time grants; initiate parole board risk assessments and actions; develop parole plans; and advise offenders on family

CLASS SERIES DESCRIPTION (Cont'd.)

CORRECTIONS CASE MANAGER

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and personal problems. Positions in this class serve as an offender advisor on issues, complaints, suggestions, and disciplinary actions.

Included in this class are positions receiving training and orientation during their initial probationary period.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level. Within limits set by professional standards, the agency's available technology and resources, and case management program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of case management operations. An example could be a decision on the process to achieve offender work or educational objectives to meet parole risk assessment guidelines. The general case management pattern, program, or system exists but must be individualized. This individualization requires analysis of offender behavioral data that is complicated or contradictory. An example could be a decision on how to motivate offenders to correct abnormal social behaviors when their work behavior is normal. Analysis is breaking the offender problem or case into parts, examining these parts, and reaching conclusions that result in case management processes. This examination requires the application of known and established counseling, rehabilitation, educational, or vocational theory, principles, conceptual models, professional penal standards, and case management precedents in order to determine their relationship to the problem. An example could be decisions on what counseling principles to apply for a process to resolve offender complaints or grievances against individuals outside the correctional system. New case management processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

Complexity -- The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of case management and counseling theories, concepts, and principles in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. While general case management policies, precedents, or non-specific practices exist, they are inadequate so they are relevant only through approximation or analogy. For example, a position may modify case management principles in developing a risk assessment for repeat offenders. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing case management guidelines so they can be applied to particular circumstances and to deal with emergencies. An example could be the modification of case management guidelines for an evaluation plan to fulfill the needs of an offender with learning disabilities.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of physically restraining and confining citizens as peace officers enforcing the law. Although such positions meet the criteria for the Enforcement and Protective Services occupational group, these contacts are incidental to

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their primary counseling and case management roles. This level involves contact involving physical restraint of offenders in a secure facility in accordance with statutory and agency-granted authorities.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team. This level may include work leader or supervisory accountability for less than two full-time equivalent positions.

CORRECTIONS CASE MANAGER II

A1A2XX

CONCEPT OF CLASS

This class primarily describes the agency level staff specialist responsible for developing and evaluating case management operations among and between separate facilities. As the agency authority on case management principles, models, and American Correctional Association (ACA) case management standards, positions guide and influence correctional decisions on how to integrate case management operations into specific outcomes by developing case management guidelines used throughout the agency. Positions are actively involved in offender classification, movements, and disciplinary systems and operations. Positions also persuade other correctional program areas to adjust or modify their operations to incorporate case management objectives. This class may also be used for those facility positions functioning as work leaders and fulfill such definition contained under the Line/Staff Authority factor in this class. Positions located at the agency staff level are not directly involved in the restraint and confinement of offenders. This class differs from the lower class of Case Manager I in the factors of Purpose of Contact and Line/Staff Authority.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level, as described here. Within limits set by professional case and population management standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. Within broader incarceration and release guidelines, the general case or population management program or system exists but must be individualized. An example could be decisions related to whether pre-release case management should differ due to the security level of offenders. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established case management theory, principles, conceptual models, professional ACA standards, and legal precedents in order to determine their relationship to the problem. An example of such decision

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could be deciding the process for case management training or audits of facility case management. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

Complexity -- The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of case management theories, concepts, and principles in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. While general policy, precedent, or non-specific practices exist, they are inadequate so they are relevant only through approximation or analogy. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing case management guidelines so they can be applied to particular circumstances and to deal with emergencies. An example could be the adaptation of ACA case management principles to deal with changes in sentencing laws, or to deal with emergency movement of offenders from county holding jails to state offender reception facilities without degrading offender classification principles and standards.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of at least two of the following:

Advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions and behaviors. As an example, positions advise agency managers and facility supervisors and managers on ways to deal with overcrowding and the necessity of mixing offender classification levels in order to solve an offender influx or new parole releases.

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories or marketing a product or service. This goes beyond what has been learned in training or repeating information that is available in another format. Examples are training correctional facility program managers on the intent of case management, and in clarifying to managers, superintendents, and parole entities the purpose and rationale behind classification models or principles.

Physically restraining and confining citizens as peace officers enforcing the law. Although such positions meet the criteria for the Enforcement and Protective Services occupational group, these contacts are incidental to their primary counseling and case management roles. This level involves contact involving physical restraint of offenders in a secure facility in accordance with statutory and agency-granted authorities.

Negotiating as an official representative of one party in order to obtain support or cooperation where there is no formal rule or law to fall back on in requiring such action or change from the other party. Such negotiation has fiscal or programmatic impact on an agency. In reaching settlements or compromises, the position does not have a rule or regulation to enforce but is accountable for the function.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor, a work leader, or a staff authority. The individual

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contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team.

NOTE: This portion of the factor is applicable only to those positions with agency-wide responsibilities as described in the concept for this class, which is used as a tradeoff for the supervisory responsibilities less than the work leader definition below.

OR

The work leader is partially accountable for the work product of two or more full-time equivalent positions, including timeliness, correctness, and soundness. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. Typical elements of direct control over other positions by a work leader include assigning tasks, monitoring progress and workflow, checking the product, scheduling work, and establishing work standards. The work leader provides input into supervisory decisions made at higher levels, including signing leave requests and approving work hours. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

OR

The staff authority is a pacesetter who has a unique level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. It is an essential component of the work assignment that has been delegated by management to the position. This authority directly influences management decisions within an agency. For example, management relies on such a position when making decisions regarding the direction that policy or a program should take in the staff authority's field of expertise. Managers and peers recognize and seek this level of technical guidance and direction regarding the application of a program or system within the agency or to its clients. An example is a position with statewide correctional case management influence on its peers and the agency management teams as to offender placement needs versus agency capabilities.

CORRECTIONS CASE MANAGER III

A1A3XX

CONCEPT OF CLASS

This class describes supervisory case management responsibilities. In addition to having a caseload, positions in this class supervise other case managers in a facility and coordinate the offender classification system operations with other facility areas such as security, housing, work, educational, recreational, and religious program supervisors. As the facility classification officer, positions also conduct review hearings on offender classifications. This class differs from the lower Case Manager II class in the Line/Staff Authority factor only.

CLASS SERIES DESCRIPTION (Cont'd.)

CORRECTIONS CASE MANAGER

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FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level. Within limits set by professional standards, the agency's available technology and resources, and case management program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of case management operations. An example could be decisions on the process to achieve offender work or educational objectives to meet risk assessment guidelines for gaining parole approval. The general case management pattern, program, or system exists but must be individualized. This individualization requires analysis of offender behavioral data that is complicated or contradictory. Analysis is breaking the offender problem or case into parts, examining these parts, and reaching conclusions that result in case management processes. This examination requires the application of known and established counseling, rehabilitation, educational, or vocational theory, principles, conceptual models, professional penal standards, and case management precedents in order to determine their relationship to the problem. An example could be decisions on what process to use to accomplish case management activities in a facility which includes determining case loads, depth and frequency of case management contacts with offenders, case management audits, and making changes in the sequence of risk assessment actions. New case management processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

Complexity -- The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of case management and counseling theories, concepts, and principles in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. While general case management policies, precedents, or non-specific practices exist, they are inadequate so they are relevant only through approximation or analogy. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing American Correctional Association (ACA) case management principles so they can be applied to particular circumstances and to deal with emergencies. An example could be the modification of case management guidelines for a plan to fulfill the facility's objectives under offender overcrowding conditions or severe, long-term security restrictions on offender movements.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of physically restraining and confining citizens as peace officers enforcing the law. As with positions in the lower Case Manager I class, such positions meet the criteria for the Enforcement and Protective Services occupational group, but these contacts are incidental to their primary purpose of advising and counseling. This class includes contact involving physical restraint of offenders in a secure facility, typically as a duty officer, in accordance with statutory and agency-granted authorities.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a unit supervisor. The unit supervisor is accountable, including signature

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authority, for actions and decisions that directly impact the pay, status, and tenure of three or more full-time equivalent positions.

At least one of the subordinate positions must be in the same series or at a comparable conceptual level. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

DEFINITIONS

Case Management: The assessment, planning, coordinating, and counseling of offenders to achieve progress through the penal institution system and return them to the general population.

ENTRANCE REQUIREMENTS

Minimum entry requirements and general competencies for classes in this series are contained in the State of Colorado Department of Personnel & Administration web site.

For purposes of the Americans with Disabilities Act, the essential functions of specific positions are identified in the position description questionnaires and job analyses.

CLASS SERIES HISTORY

Effective 7/1/02 (DLF). Reviewed as part of EPS Consolidation Study; only date and class history updated. Published as proposed 5/8/02.

Revised 9/1/93 (DLF). Job Evaluation System Revision project. Published as proposed 6/11/93, 12/13/93.

SUMMARY OF FACTOR RATINGS

Class Level	Decision Making	Complexity	Purpose of Contact	Line/Staff Authority
Corrections Case Manager I	Process	Formulative	Restrain	Indiv. Contributor
Corrections Case Manager II	Process	Formulative	*Advise, Clarify, Restrain, or Negotiate	Indiv. Contributor, Work Leader, or Staff Authority
Corrections Case Manager III	Process	Formulative	Restrain	Unit Supervisor

* Must have at least 2 of the 4.

ISSUING AUTHORITY: Colorado Department of Personnel & Administration



STATE OF COLORADO

CLASS SERIES DESCRIPTION

July 1, 2002

CORRECTIONAL, YOUTH, OR CLINICAL SECURITY OFFICER

A1D1IX TO A1D7XX

DESCRIPTION OF OCCUPATIONAL WORK

This class series uses seven levels in the Enforcement and Protective Services occupational group and describes physical security and control over adult offenders, youth offenders/residents, or mental health/psychiatric offenders in a secure facility. The work entails custody and security responsibilities over offenders, youth offenders/residents, or psychiatric clinical care clients as to their housing, treatment, rehabilitation, education, health care, recreation, transportation, and/or employment in centers, prisons, institutes, homes/cottages, camps, or other similar facilities. Work involves oversight, supervision, crisis intervention, or evaluation to assure the physical safety and security of property and others. The work may entail decisions that could be in a life-threatening situation. The work in mental health settings includes milieu management and clinical interventions in high-risk units as determined by management. The work includes the enforcement of statutes, regulations, orders, directives, and procedures related to each facility.

Positions may have varying degrees of peace officer authority as designated by state statutes and department directives to enforce criminal and civil laws and to physically detain or restrain others. Basic peace officer level definitions relating to offenders and juvenile probation are found in C.R.S. 18-1-901, with specific authorities for individual agencies or departments found in their agency supporting statutes or appointing authorities' delegations. Youth detainment authorities are found in C.R.S. 19-2-201 and according to appointing authority delegations. The mental health treatment and security requirements are found in C.R.S. 18-1-901 and 27-10-101.

The levels in this class series range from the intern level correctional/security officer providing basic security and control to the third-level supervisor responsible for one or more program areas of support to offenders, clients, or residents. This class series contains two classes at the III level; one as a specialist, the other as a supervisor. Due to the rehabilitative and/or treatment objectives in some youth and mental health environments, supervisory positions in those settings may be found in other professional treatment, counseling, or rehabilitation classes. Positions above the highest level in this class series are evaluated under the Management Evaluation Plan. This class series is distinguished from the Safety/Security Officer class series as that class entails public law enforcement work beyond that included in this class series.

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For purposes of determining supervision, positions supervising offenders/clients may fit the definition of supervision if the position performs these elements of supervision as defined in the Line/Staff Authority factors and the offenders/clients meet the wage earner and employer/employee relationship requirements. On the other hand, positions "overseeing" an offender work gang are not considered to meet the above elements of supervision.

INDEX: The first level, Correctional, Youth, or Clinical Security Intern begins on this page, Correctional, Youth, or Clinical Security Officer I begins on this page, Correctional, Youth, or Clinical Security Officer II begins on page 4, Correctional, Youth, or Clinical Security Specialist III begins on page 5, Correctional, Youth, or Clinical Security Supervisor III begins on page 7, Correctional/Youth Security Officer IV begins on page 8, and Correctional/Youth Security Officer V begins on page 10.

CORR'L, YOUTH, OR CLINICAL SECURITY INTERN A1D1IX

This class describes the entry level. Work is designed to train positions for a higher level in the class series. Although tasks are similar to those of the fully operational level, assignments are structured and performed with direction and assistance from others. Positions carry out established work processes and operations by learning to apply and follow procedures, techniques, rules, and regulations. Once training has been completed, the position is moved to the next level. Positions should not remain in this class indefinitely.

CORR'L, YOUTH, OR CLINICAL SECURITY OFFICER I A1D2TX

CONCEPT OF CLASS

This class describes the fully operational officer providing physical security and control of offenders or clients. Duties involve the performance of security, movement, transportation, and restraining activities as directed by established facility orders, descriptions, rules, and procedures. The work may be individualized or in a team environment depending upon specific responsibilities at a particular station or post. Duties include monitoring, inspecting, searching, directing, documenting, and restraining offenders, offenders, or clients/residents in housing, educational, recreational, employment, confinement, or treatment settings. The work involves monitoring and controlling physical movements via electronic, manual, or direct personal means. This includes monitoring alarms, systems, and schedules for controlling movement, access, and traffic in or about secure facilities. Duties may include maintaining equipment and keeping inventories of keys, tools, or weapons. Officers conduct physical searches of persons and facilities to control contraband and apply verbal and physical force according to agency guidelines. Positions can be used to transport offenders or clients between facilities and escort visitors within a facility.

Positions in mental health institutions or youth/juvenile areas may participate in work of a clinical treatment or counseling nature, but the assignment is primarily security and control and does not include professional treatment, counseling, therapy, or social work. Included in this

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CORRECTIONAL, YOUTH, OR CLINICAL SECURITY OFFICER
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class are positions receiving orientation and training where performance is expected to reach the fully operational level within the initial probationary period.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the operational level. Within limits set by the specific security and control process or regulations, choices involve deciding what security operation is required to carry out the process. This includes determining how the security operation will be completed. An example could be deciding the proper control of offenders when facility security equipment is not working. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established security process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices which are in the form of agency and unit procedures, memoranda, or post orders. As an example, although continuum of force guidelines exists, positions must decide the appropriate level of physical control response to client(s) or offender(s) disturbances.

Complexity -- The nature of, and need for, analysis and judgment is patterned. Positions study security and control information to determine what it means and how it fits together in order to get practical solutions in the form of responses to client or offender behavior deviations. Guidelines in the form of post orders, procedures, and emergency response directives exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines, which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from physical control alternatives where all are correct but one is better than another depending on the given circumstances of the security situation. As an example, choosing verbal warning, physical restraint or force with combative techniques, activity termination, unit lockdown, or the use of deadly force (use of weapons) may all be alternatives, but one may be preferable in a given situation.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of verbally and physically restraining and confining others as peace officers enforcing the law. These positions meet the criteria for the Enforcement and Protective Services occupational group. This class requires contact involving verbal and physical restraint of patients, offenders, clients/residents, offenders, or visitors in or about a secure facility or other specifically designated area in accordance with statutory and agency-granted authorities. Security positions in youth settings may be limited to detaining youth until they are placed in custody of law enforcement, but that contact still meets the intent of this paragraph.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative

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CORRECTIONAL, YOUTH, OR CLINICAL SECURITY OFFICER
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problem-solving team. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

CORR'L, YOUTH, OR CLINICAL SECURITY OFFICER II A1D3XX

CONCEPT OF CLASS

This class describes the fully operational correctional or security services officer with lead work or limited supervisory responsibilities. In addition to work described by the Correctional, Youth or Clinical Security Officer I class, positions in this class have additional oversight duties over others. The lead work duties include, but are not limited to, assigning security, control, or crisis intervention work; checking the work for conformance to standards and orders/descriptions; training new employees on security, control, or intervention procedures and processes; providing input into performance plans and appraisals; or recommending post or station assignments for differing activities or security conditions. The work in this class differs from the Officer I in the Line/Staff Authority factor only.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the operational level. Within limits set by the specific security and control process or agency regulations, choices involve deciding what security operation is required to carry out the process. This includes determining how the security operation will be completed. An example could be deciding the proper control of offenders when facility security equipment is not working. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established security process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices which are in the form of agency and unit procedures, memoranda, or post orders. As an example, although continuum of force guidelines exists, positions must decide the appropriate level of physical control response to client(s) or offender(s) disturbances.

Complexity -- The nature of, and need for, analysis and judgment is patterned. Positions study security and control information to determine what it means and how it fits together in order to get practical solutions in the form of responses to client or offender behavior deviations. Guidelines in the form of post orders, procedures, and emergency response directives exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines, which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from physical control alternatives where all are correct but one is better than another depending on the given circumstances of the security situation. As an example, choosing verbal warning, physical restraint or force with combative techniques, activity termination, unit lockdown, or the use of deadly force (use of weapons) may all be alternatives, but one may be preferable in a given situation.

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CORRECTIONAL, YOUTH, OR CLINICAL SECURITY OFFICER
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Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of verbally and physically restraining and confining others as peace officers enforcing the law. These positions meet the criteria for the Enforcement and Protective Services occupational group. This class requires contact involving verbal and physical restraint of patients, offenders, clients/residents, offenders, or visitors in or about a secure facility or other specifically designated area in accordance with statutory and agency-granted authorities. Security positions in youth settings may be limited to detaining youth until they are placed in custody of law enforcement, but that contact still meets the intent of this paragraph.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a work leader. The work leader is partially accountable for the work product of two or more full-time equivalent positions, including timeliness, correctness, and soundness. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. Typical elements of direct control over other positions by a work leader include assigning security and control tasks, monitoring progress and work flow, checking security and control, and establishing work standards. The work leader may provide input into supervisory decisions made at higher levels, including signing leave requests or approving work hours. This level may include supervisory accountability, which does not meet the next level in this series.

CORR'L, YOUTH, OR CLINICAL SECURITY SPECIALIST III A1D4XX

CONCEPT OF CLASS

This class describes the third-level correctional officer. The work in this class includes the responsibility for work decisions on establishing specialist processes in areas such as armory or weapons range operations, training coordination, recreational activities, or others. Positions in this class differ from the Correctional, Youth or Clinical Security Officer II class in the Decision Making, Purpose of Contact, and Line/Staff Authority factors.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- Decisions regularly made are at the process level. Within limits set by professional standards, the agency's available technology and resources, and correctional program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. The general pattern, program, or system exists but must be individualized. An example of such could be decisions on the process to accomplish recreational programs in a particular facility. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models,

CLASS SERIES DESCRIPTION (Cont'd.)
CORRECTIONAL, YOUTH, OR CLINICAL SECURITY OFFICER
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professional standards, and precedents in order to determine their relationship to the problem. For example, decisions on training programs require the application of concepts of training development as the position designs activities. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

Complexity -- The nature of, and need for, analysis and judgment is patterned. Positions study security and control information to determine what it means and how it fits together in order to get practical solutions in the form of responses to behavioral deviations. Guidelines in the form of post orders, procedures, and emergency response directives exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines, which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from physical control alternatives where all are correct but one is better than another depending on the given circumstances of the security situation. As an example, choosing the appropriate security and safety process for operating an armory or weapons range requires choices between alternatives.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of both of the following:

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories. This goes beyond what has been learned in training or repeating information that is available in another format. For example, positions train others on the rationale behind the continuum of force guidelines.

Physically restraining and confining others as peace officers enforcing the law. These positions meet the criteria for the Enforcement and Protective Services occupational group. This class requires contact involving verbal and physical restraint of patients, offenders, or visitors in or about a secure facility or other specifically designated area in accordance with statutory and agency-granted authorities.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

CORR'L, YOUTH, OR CLINICAL SECURITY SUPERVISOR III A1D5XX

CONCEPT OF CLASS

This class describes the first supervisory level. In addition to work performed in lower classes, the work in this class includes the responsibility for supervisory duties, which influence the pay, status, or tenure of others. As supervisors, positions have signature authority for actions directly affecting others in the form of performance appraisals and plans, documentation to support

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recommendation on corrective actions, and resolving the informal grievances of subordinates. Positions may also participate in the hiring, promotion, or transfer processes. Positions in this class differ from the Correctional, Youth or Clinical Security Officer II class in the Line/Staff Authority factor. Positions in this class differ from the Correctional, Youth or Clinical Security Specialist III class in the Decision Making and Line/Staff Authority factors.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- Decisions regularly made are at the operational level. Within limits set by the specific security and control process or agency regulations, choices involve deciding what security operation is required to carry out the process. This includes determining how the security operation will be completed. An example could be deciding the proper control of offenders when facility security equipment is not working. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established security process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices which are in the form of agency and unit procedures, memoranda, or post orders. As an example, although continuum of force guidelines exists, officers must decide the appropriate level of physical control response to offender(s) disturbances.

Complexity -- The nature of, and need for, analysis and judgment is patterned. Positions study security and control information to determine what it means and how it fits together in order to get practical solutions in the form of responses to behavioral deviations. Guidelines in the form of post orders, procedures, and emergency response directives exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines, which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from a number of alternatives, which may be correct, but one is better than another depending on the given circumstances of the situation. As an example, choosing verbal warning, physical restraint or force with combative techniques, activity termination, unit lockdown, or the use of deadly force (use of weapons) may all be alternatives, but one may be preferable in a given situation.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of verbally and physically restraining and confining others as peace officers enforcing the law. These positions meet the criteria for the Enforcement and Protective Services occupational group. This class requires contact involving verbal and physical restraint of patients, offenders, clients/residents, offenders, or visitors in or about a secure facility or other specifically designated area in accordance with statutory and agency-granted authorities. Security positions in youth settings may be limited to detaining youth until they are placed in custody of law enforcement, but that contact still meets the intent of this paragraph.

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CORRECTIONAL, YOUTH, OR CLINICAL SECURITY OFFICER
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Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a unit supervisor. The unit supervisor is accountable, including signature authority, for actions and decisions that directly impact the pay, status, and tenure of three or more full-time equivalent positions. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

CORRECTIONAL/YOUTH SECURITY OFFICER IV

A1D6XX

CONCEPT OF CLASS

This class describes a supervisory or staff authority level in a correctional setting. The duties involve the supervision of multiple units within security, housing, or other prison program areas. The work is oriented more towards planning, controlling, and evaluating the program areas and in working with other program supervisors and managers toward achieving common goals and objectives. The work at this level typically includes responsibility as duty officer of a facility during night, weekend, and holiday schedules on a rotational basis. This class also describes those positions having agency wide responsibility for specialty areas, such as armory, recreation, etc. This class differs from the Correctional, Youth, or Clinical Security Supervisor III class in the Decision Making factor and possibly in Line/Staff Authority.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- Decisions regularly made are at the process level. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. The general pattern, program, specialty, or system exists but must be individualized. An example of such could be deciding religious or recreational processes in a particular facility; or, deciding specialty training for the agency. The general program requirements exist in agency guidelines, but the local program must be individualized to fit offender or client needs and the particular security classification level of offenders or the facility. An example could be the modification of housing divisions based on changes in offender populations, which necessitate a different security level. This individualization requires analysis of data that is complicated. Analysis is breaking the security problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, precedents, statutes, and case law in order to determine their relationship to the problem. For example, decisions on security programs require the application of the standards of the American Correctional Association (ACA) in modifying housing or work activities for offenders. Decisions at this level involve establishing

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CORRECTIONAL, YOUTH, OR CLINICAL SECURITY OFFICER
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and implementing post orders. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

Complexity -- The nature of, and need for, analysis and judgment is patterned. Positions study security and control information to determine what it means and how it fits together in order to get practical solutions in the form of responses to behavioral deviations. Guidelines in the form of agency processes and emergency response directives exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines, which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from physical control alternatives where all are correct but one is better than another depending on the given circumstances of the security situation. As an example, positions may choose locations for recreational or work activities based on the available alternatives.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of either of the following:

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories. This goes beyond what has been learned in training or repeating information that is available in another format. An example could be clarifying, during corrections' or youth program audits, the intent of requiring job skills of offenders or additional client education in order to reverse recidivism levels.

Physically restraining and confining others as peace officers enforcing the law. These positions meet the criteria for the Enforcement and Protective Services occupational group. This class requires contact involving verbal and physical restraint of patients, offenders, clients/residents, offenders, or visitors in or about a secure facility or other specifically designated area in accordance with statutory and agency-granted authorities. Security positions in youth settings may be limited to detaining youth until they are placed in custody of law enforcement, but that contact still meets the intent of this paragraph.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as staff authority, a unit supervisor, or a line manager. The staff authority is a pacesetter who has a rare level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. This authority directly influences management decisions at least on an agency-wide basis. Managers and peers recognize and seek this level of technical guidance and direction for development of an agency-wide system or regarding the application of a statewide system within the agency or to its clients.

OR

The unit supervisor is accountable, including signature authority, for actions and decisions that directly impact the pay, status, and tenure of three or more full-time equivalent positions. Positions supervised must be in this class series or at similar concept levels in other classes. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving

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informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

OR

The line manager must be accountable for multiple units through the direct supervision of at least two subordinate Unit Supervisors; and, have signature authority for actions and decisions that may directly impact pay, status, and tenure. Elements of formal supervision must include providing documentation to support recommended corrective actions and disciplinary actions, rater/reviewer signature on performance plans and appraisals, and resolving informal grievances. Positions may start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

CORRECTIONAL/YOUTH SECURITY OFFICER V

A1D7XX

CONCEPT OF CLASS

This class describes the highest level in this series. The duties typically involve management and administration of one or more segments of a facility, which includes, but is not limited to, the operational elements of security, housing, recreational, educational, or religious programs. Supervision is received from management profile positions. A primary responsibility at this level is to direct subordinate units and their program areas to meet the objectives of other areas through contact and coordination with other program areas. Positions in this level typically act as the duty officer of a facility during night, weekend, and holiday schedules on a rotational basis. Positions in this level differ from the Correctional/Security Officer IV class in the Complexity factor and possibly in the Decision Making and Line/Staff Authority factors.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- Decisions regularly made are at the process level. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. The general pattern, program, or system exists but must be individualized. An example of such could be deciding recreational processes in a particular facility. The general program requirements exist in agency guidelines, but the local program must be individualized to fit offender or client needs and the particular security classification level of offenders or the facility. An example could be the modification of housing divisions based on changes in offender populations, which necessitate a different security level. This individualization requires analysis of data that is complicated. Analysis is breaking the security problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, precedents, statutes, and case law in order to determine their relationship to the problem. For example, decisions on security programs

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require the application of the standards of the American Correctional Association (ACA) in modifying housing or work activities for offenders or clients. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

OR

The decisions regularly made are at the interpretive level. Within limits of the facility's strategic master plan and allocated human and fiscal resources, choices involve determining tactical plans to achieve the facility's administrative objectives established by the higher management (warden/superintendent) level. This involves establishing what processes will be done, developing the budget, and developing the staffing patterns and work units in order to deploy staff. This level includes inventing and changing systems and guidelines that will be applied by subordinate units. By nature, this is the first level where positions are not bound by processes and operations in their own programs as a framework for decision making and there are novel or unique situations that cause uncertainties that must be addressed at this level. Through deliberate analysis and experience with these unique situations, the manager or expert determines the systems, guidelines, and programs for the future. For example, positions at this level review and approve the post orders that subordinate positions use to guide their actions in the security and control of offenders.

Complexity -- The nature of, and need for, analysis and judgment is formulative. Positions evaluate the relevance and importance of criminal justice and correctional theories, concepts, and principles in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. While general agency policy, precedent, or non-specific security and control practices exist in the form of department policies and national standards, they are inadequate so they are relevant only through an approximation or analogy. For example, at a particular security level, certain general security practices exist, but positions in this class must modify them to fit physical equipment or facility limits. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing guidelines so they can be applied to particular circumstances and to deal with emergencies. For example, the offender programs manager may need to evaluate the appropriate recreational models to provide for particular classifications of offenders in meeting ACA Standards.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of either of the following:

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories. This goes beyond what has been learned in training or repeating information that is available in another format. An example could be clarifying, during corrections or youth program audits, the intent of requiring job skills of offenders or additional education in order to reverse recidivism levels.

Physically restraining and confining or ordering others as peace officers enforcing the law. These positions meet the criteria for the Enforcement and Protective Services occupational

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group. This class requires contact involving verbal and physical restraint of patients, offenders, clients/residents, offenders, or visitors in or about a secure facility or other specifically designated area in accordance with statutory and agency-granted authorities. Security positions in youth settings may be limited to detaining youth until they are placed in custody of law enforcement, but this contact still meets the intent of this paragraph.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a line manager or senior manager. A line manager must be accountable for multiple units through the direct supervision of at least three subordinate Unit Supervisors (Correctional/Security Services Officer III-Supervisors) or positions of a similar level; and, have signature authority for actions and decisions that may directly impact pay, status, and tenure. Elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, rater/reviewer signature on performance plans and appraisals, and resolving informal grievances. Positions may start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

OR

The senior manager must be accountable for multiple units through the direct supervision of at least two subordinate Correctional/Security Officer IVs or positions of similar level; and, have signature authority for actions and decisions that may directly impact pay, status, and tenure. Elements of formal supervision must include providing documentation to support recommendations on corrective actions and disciplinary actions, rater/reviewer signature on performance plans and appraisals, and resolving informal grievances. Positions may start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

DEFINITIONS

Adult correctional offender service: Work related to the security, housing, custody, and/or activities of offenders in a state facility according to the Colorado Code of Penal Discipline.

Institutional (forensic) service: Work related to the security, custody, and control of clients or patients in a high-risk state psychiatric or mental health facility, hospital, institute, center, or home.

Youth/juvenile service: Work related to the security, custody, and control/management of youth/juvenile offenders/clients/residents in a state youth detention, treatment, or offender facility, center, camp, or similar setting.

NOTE: Some positions may prefer to use working titles with military type rank designations, such as sergeant, lieutenant, captain, major, etc.

ENTRANCE REQUIREMENTS

Minimum entry requirements and general competencies for classes in this series are contained in the State of Colorado Department of Personnel & Administration web site.

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For purposes of the Americans with Disabilities Act, the essential functions of specific positions are identified in the position description questionnaires and job analyses.

CLASS SERIES HISTORY

Revised 7/1/02 (DLF). EPS Consolidation Study. Moved all classes into one series. Added clinical security work in a high-risk mental health facility to the lower four classes. Changed series title from Correctional or Security Services Officer to Correctional, Youth or Clinical Security Officer. Published as proposed 5/8/02.

Effective 3/1/96 (DLF). Added Youth Service's use of all levels. Published as proposed 1/15/96.

Effective 9/1/93 (DLF). Job Evaluation System Revision project. Published as proposed 6/11/93.

Revised 4/17/91. Changed pay grades on all correctional officers (A8700-06,8715).

Revised 10/1/87. Changed class code and title on Forensic Security Officer (A8715).

Revised 7/1/87. Changed entrance requirements on all correctional officers (A8702-06).

Created 7/1/87. Correctional Intern and Correctional Officer A (A8700-01).

Revised 3/12/81. Changed entrance requirements and deleted options, Correctional Technicians, Specialists, Supervisors, and Managers (A8703-06).

Created 7/1/77. Forensic Security Officer (A8715).

Created 1/1/75. Youth Service Worker A/B (A8507-08). Correctional Officer B through Manager classes (A8702-06).

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SUMMARY OF FACTOR RATINGS

Class Level*	Decision Making	Complexity	Purpose of Contact	Line/Staff Authority
Corr, Youth, or Clinical Security Intern	na	na	na	na
Corr, Youth, or Clinical Security Off I	Operational	Patterned	Restrain	Indiv. Contributor
Corr, Youth, or Clinical Security Off II	Operational	Patterned	Restrain	Work Leader
Corr, Youth, or Clinical Security Specialist III	Process	Patterned	Clarify & Restrain	Indiv. Contributor
Corr, Youth, or Clinical Security Supv III	Operational	Patterned	Restrain	Unit Supervisor
Corr/Youth Security Off IV	Process	Patterned	Clarify or Restrain	Staff Authority, Unit Supervisor, or Manager
Corr/Youth Security Off V	Process or Interpretive	Formulative	Clarify or Restrain	Manager or Senior Manager

* The Correctional/Security Intern class is described in a separate class description: A1D11*.

ISSUING AUTHORITY: Colorado Department of Personnel & Administration



STATE OF COLORADO

CLASS SERIES DESCRIPTION

July 1, 2002

CORRECTIONAL SUPPORT TRADES SUPERVISOR

A1L1TX TO A1L4XX

DESCRIPTION OF OCCUPATIONAL WORK

This class series uses four levels in the Enforcement and Protective Services occupational group and describes correctional supervisory work in the maintenance, housekeeping, food service, or other labor, trade, or craft occupations. In addition, the work includes security and control of offenders or youth in or about a secure facility. The work includes the planning, preparation, acquisition, service, or storage of food, raw materials or equipment; the general maintenance and repair of buildings, fixtures, equipment, systems or other items; and/or the housekeeping, laundry, or any other occupation not covered in other classes. Although these classes are primarily oriented to the maintenance, food service, or housekeeping occupations, the work includes ongoing responsibility for the training of offenders or youth in the food service trade. This includes oversight, supervision, intervention, or evaluation of offenders or youth to assure the safety and security of property and others. This work includes the enforcement of statutes, regulations, orders, and procedures of the facility.

For purposes of determining supervision, positions supervising offenders or youth may fit the definition of supervision if the position performs these elements of supervision: issuing performance corrective actions and initiating disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. This includes offenders in a wage-earner role in an employer/employee relationship. Positions "supervising" a work crew of "as assigned" offenders or youths do not meet the above elements of supervision.

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CORRECTIONAL SUPPORT TRADES SUPERVISOR
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CORRECTIONAL SUPPORT TRADES SUPERVISOR I A1L1TX

CONCEPT OF CLASS

This class describes the first supervisory level. In addition to performing fully-operational work in trades occupations, positions in this level have supervisory responsibility for offenders or youth. This supervision entails assigning and evaluating work, handling informal grievances, initiating corrective and disciplinary actions, and participating in the hiring and firing of the youth/offenders. Positions are expected to train the offenders or youth on skills and knowledge in the trades occupation. The work includes responsibility for the security and control of equipment, raw materials, and other resources. Positions are actively involved in the physical control of persons assigned to them. This class also describes those positions receiving orientation and training to the work setting within the initial probationary period.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to carry out the process. This includes determining how the operation will be completed. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices. For example, positions decide what and how certain food preparation actions are required to complete menus.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study equipment and materials information to determine what it means and how it fits together in order to get practical solutions in the form of completed work assignments in the food service occupation. Guidelines in the form of master menus, dietary guidelines, trade practices, codes or specifications, health or sanitation regulations, facility directives and agency processes exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines, which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. For example, positions choose the appropriate type of maintenance or repair action when failures occur.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of either of the following:

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. For example, positions discover causes of unsanitary conditions by probing for information on the problems.

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CORRECTIONAL SUPPORT TRADES SUPERVISOR
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Advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions and behaviors. For example, positions advise case managers and security officers on appropriate responses to linen control processes to preclude losses and thefts.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a work leader or supervisor. The work leader is partially accountable for the work product of two or more full-time equivalent positions (typically offenders or youth), including timeliness, correctness, and soundness. Typical elements of direct control over other positions by a work leader include assigning tasks, monitoring progress and work flow, checking the product, scheduling work, and establishing work standards. The work leader provides input into supervisory decisions made at higher levels. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

OR

The supervisor is accountable, including signature authority, for actions and decisions that directly impact the pay, status, and tenure of three or more full-time equivalent positions. Positions supervised are typically offender or youth employees of the unit. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

CORRECTIONAL SUPPORT TRADES SUPERVISOR II A1L2XX

CONCEPT OF CLASS

This class describes the second supervisory level. In addition to the work described in the previous class, positions in this level decide the trades work processes used by others. This class differs from the Correctional Support Trades Supervisor I in the Decision Making and Line/Staff Authority factors.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. For example, maintenance positions have authority to decide how preparation and serving work processes will be completed in conjunction with established facility security processes. The general pattern, program, or system exists but must be individualized. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known

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CORRECTIONAL SUPPORT TRADES SUPERVISOR
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and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. For example, positions decide the raw material and equipment control and inventorying processes for the maintenance operation. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study equipment and materials information to determine what it means and how it fits together in order to get practical solutions in the form of completed work assignments in the food service occupation. Guidelines in the form of master menus, dietary guidelines, trade practices, codes or specifications, health or sanitation regulations, facility directives and agency processes exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines, which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. For example, positions choose the appropriate type of substitute item when shortages occur.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of both of the following:

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. For example, positions interview managers and security supervisors to determine the adequacy of food service.

Advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions and behaviors. For example, positions advise duty officers on plant operations to solve maintenance problems on weekends.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a work leader or supervisor. The work leader is partially accountable for the work product of two or more full-time equivalent positions, including timeliness, correctness, and soundness. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. Typical elements of direct control over other positions by a work leader include assigning tasks, monitoring progress and work flow, checking the product, scheduling work, and establishing work standards. The work leader provides input into supervisory decisions made at higher levels, including signing leave requests and approving work hours. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

OR

The unit supervisor is accountable, including signature authority, for actions and decisions that directly impact the pay, status, and tenure of three or more full-time equivalent positions. At least one of the subordinate positions must be in the same series or at a comparable conceptual

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level. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

CORRECTIONAL SUPPORT TRADES SUPERVISOR III A1J3XX

CONCEPT OF CLASS

This class describes the third supervisory level. In addition to work described in previous classes, positions in this level adapt processes to the standards and programs of the agency. This class differs from the Correctional Support Trades Supervisor II class in the Complexity, Purpose of Contact, and Line/Staff Authority factors.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. For example, positions use general health codes and ACA standards to decide housekeeping processes. The general pattern, program, or system exists but must be individualized. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. For example, positions examine professional food service operation standards in order to determine preventative sanitation operations. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

Complexity -- The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of concepts and principles in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. For example, positions plan maintenance repair programs with other occupations, such as security and housing supervisors/managers. While general policy, precedent, or non-specific practices exist, they are inadequate so they are relevant only through approximation or analogy. In conjunction with concepts and principles, positions use judgment and resourcefulness in tailoring the existing guidelines so they can be applied to particular circumstances and to deal with emergencies. For example, positions prepare facility plans for equipment replacements and ways to gain food or sanitation cost savings.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of at least two of the following:

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Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. For example, positions interview other staff members to determine food service problems.

Advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions and behaviors. For example, positions advise duty officers on food service or maintenance operations to solve problems on weekends.

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories. This goes beyond what has been learned in training or repeating information that is available in another format. For example, positions train security/housing supervisors on food service and sanitation requirements and standards.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a unit supervisor. The unit supervisor is accountable, including signature authority, for actions and decisions that directly impact the pay, status, and tenure of three or more full-time equivalent positions. Positions supervised must be in this class series or in similar conceptual levels in other classes. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

CORRECTIONAL SUPPORT TRADES SUPERVISOR IV A1J4XX

CONCEPT OF CLASS

This class describes the operating manager level and is typically only used in food service operations. Positions in this level perform administrative and supervisory work in directing the food service operations in a facility. Positions are involved in the preparation, presentation, and justification of a food service budget; policy determinations and implementation of such; administration on matters of food service planning, operational procedures, equipment replacement, and staffing levels; and, determining priorities for raw materials procurement. This class differs from the Correctional Support Trades Supervisor III class in the Decision Making and Line/Staff Authority factors and possibly in Complexity.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the interpretive level, as described here. Within limits of the strategic master plan and allocated human and fiscal resources, choices involve determining tactical plans to achieve the objectives established by the higher management (strategic) level. This involves establishing what processes will be done, developing the budget, and developing the staffing patterns and work units in order to deploy

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CORRECTIONAL SUPPORT TRADES SUPERVISOR
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staff. For example, positions decide labor and equipment cost forecasts, improvements to efficiency, and special dietary capabilities for the facility. This level includes inventing and changing systems and guidelines that will be applied by others statewide. By nature, this is the first level where positions are not bound by processes and operations in their own programs as a framework for decision making and there are novel or unique situations that cause uncertainties that must be addressed at this level. Through deliberate analysis and experience with these unique situations, the food service manager or expert determines the systems, guidelines, and programs for the future. For example, positions determine facility and equipment replacement needs for the future.

Complexity -- The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of concepts and principles in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. For example, positions plan food service programs with other occupations, such as security and housing supervisors/managers. While general policy, precedent, or non-specific practices exist, they are inadequate so they are relevant only through approximation or analogy. In conjunction with concepts and principles, positions use judgment and resourcefulness in tailoring the existing guidelines so they can be applied to particular circumstances and to deal with emergencies. For example, positions prepare plans for equipment replacements and ways to gain food cost savings.

OR

The nature of, and need for, analysis and judgment is strategic, as described here. Positions develop guidelines to implement a program that maintains the agency's mission. Guidelines do not exist for most situations. In directive situations, positions use judgment and resourcefulness to interpret circumstances in a variety of situations and establish guidelines that direct how a departmental/agency program will be implemented. For example, positions develop long-range plans for facility remodeling efforts.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of all of the following:

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. For example, positions interview other facility managers to determine food service problems before crisis develop.

Advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions and behaviors. For example, positions advise other supervisors on capabilities of food service systems.

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories. This goes beyond what has been learned in training or repeating information that is available in another format. For example, positions clarify the underlying rationale of dietary requirements or limits on food service operations.

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CORRECTIONAL SUPPORT TRADES SUPERVISOR
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Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a manager. The manager must be accountable for multiple units through the direct supervision of at least two subordinate Correctional Support Trades Supervisor IIs or IIIs or comparable positions; and, have signature authority for actions and decisions that directly impact pay, status, and tenure. Elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, second-level signature on performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

DEFINITIONS

Food Service: This occupation describes work in the planning, purchasing, storing, preparation, and service of meals to offenders.

General Maintenance Trades: This occupation describes general building maintenance and repair work in the building trades such as carpentry, painting, etc. Positions perform or supervise maintenance and repair of buildings, fixtures, or other equipment. Physical plant supervision/management describes work in planning and oversight of the maintenance, repair, or construction of facilities, grounds, and utilities.

Housekeeping & Laundry: This occupation describes work involving cleaning and maintaining buildings, furnishings, equipment, and surrounding areas. The laundry occupation describes work supervising the sorting, washing, drying, mending, ironing, folding, and distributing linens and garments.

ENTRANCE REQUIREMENTS

Minimum entry requirements and general competencies for classes in this series are contained in the State of Colorado Department of Personnel & Administration web site.

For purposes of the Americans with Disabilities Act, the essential functions of specific positions are identified in the position description questionnaires and job analyses.

CLASS SERIES HISTORY

Effective 7/1/02 (DLF). EPS Consolidation Study. Consolidated Maintenance, Food Service, and Housekeeping/Other classes into this series. No pay grade changes. Published as proposed 5/8/02.

Revised 3/1/96 (DLF). Added Youth Service's use of first class. Published as proposed 1/15/96.

Revised 5/1/95 (DLF). Published as proposed 3/22/95.

Revised 12/30/94 (DLF). Published as proposed 9/15/94.

CLASS SERIES DESCRIPTION (Cont'd.)
CORRECTIONAL SUPPORT TRADES SUPERVISOR
July 1, 2002

Revised 9/1/93 (DLF). Job Evaluation System Revision project. Published as proposed 6/11/93.
Revised 4/17/91. Changed salaries.

Revised 3/1/90. Changed pay differential on Supervisor I (A8754).

Revised 7/1/87. Changed options, nature of work, and entrance requirements.

Revised 7/1/82. Changed titles and nature of work.

Revised 7/1/81. Changed class codes, titles, nature of work and entrance requirements.

Created 5/1/78.

SUMMARY OF FACTOR RATINGS

Class Level	Decision Making	Complexity	Purpose of Contact	Line/Staff Authority
C. S. Trades Supervisor I	Operational	Patterned	Detect or Advise	Work Leader or Unit Supervisor (offenders)
C. S. Trades Supervisor II	Process	Patterned	Detect & Advise	Work Leader or Unit Supv. (1 in series)
C. S. Trades Supervisor III	Process	Formulative	2 of: Detect, Advise, or Clarify	Unit Supervisor (all in series)
C. S. Trades Supervisor IV	Interpretive	Formulative or Strategic	Detect, Advise, & Clarify	Manager

ISSUING AUTHORITY: Colorado Department of Personnel & Administration



STATE OF COLORADO

CLASS SERIES DESCRIPTION

July 1, 2002

CRIMINAL INVESTIGATOR

A2A1TX TO A2A5XX

DESCRIPTION OF OCCUPATIONAL WORK

This class series includes five levels in the Enforcement and Protective Services occupational group and describes forensic analysis of physical evidence and/or field investigations pertaining to criminal activities.

Work involves identifying, collecting, preserving, analyzing, and summarizing evidence, which may include conducting tests to analyze physical evidence and interpreting lab results. Positions gather facts by locating and interviewing witnesses, informants, and suspects; examine documents and observe conditions to verify facts; and, evaluate and present findings and evidence to support any recommended prosecution. Criminalists also reconstruct and search crime scenes and prepare presentations on test techniques. This class series, by agency mission or policy, focuses primarily on law enforcement as opposed to compliance of regulated activities. While some positions may also be involved in regulation of an industry, the principle focus of the assignment is on law enforcement related activities where the results of an investigation are presented to an attorney general, a district attorney, a court, or a grand jury to consider prosecution.

Positions in this series have varying degrees of peace officer authority, designated by state statutes and department directives, to enforce laws and physically detain and/or arrest others and may use deadly force. Basic peace officer definitions are found in C.R.S. 18-1-901, with other specific authorities found in agency supporting statutes.

INDEX: Criminal Investigator Intern and Criminal Investigator I begin on page 2, Criminal Investigator II begins on page 4, Criminal Investigator III begins on page 6, and Criminal Investigator IV begins on page 8.

CLASS SERIES DESCRIPTION (Cont'd.)

CRIMINAL INVESTIGATOR

July 1, 2002

CRIMINAL INVESTIGATOR INTERN

A2A1IX

CONCEPT OF CLASS

This class describes the entry level. Work is designed to train positions for a higher level in the class series. Although tasks are similar to those of the fully-operational level, assignments are structured and performed with direction and assistance from others. Positions carry out established work processes and operations by learning to apply and follow procedures, techniques, rules, and regulations. Once training has been completed, the position is to be moved to the next level. Positions should not remain in this class indefinitely.

CRIMINAL INVESTIGATOR I

A2A2TX

CONCEPT OF CLASS

This class describes the fully-operational investigator or criminalist. Work includes identifying suspects, interviewing witnesses, examining books or records, verifying the authenticity of documents, collecting evidence, preparing affidavits for search warrants and executing warrants, issuing criminal summonses, writing reports of findings, and training local police officers in investigative techniques. Some positions in this class work in a laboratory. Such criminology work involves collecting, preserving, and identifying physical evidence; performing physical and chemical tests and interpreting results; preparing reagents and performing routine maintenance on instruments. Positions in this class may conduct multi-jurisdictional field investigations, internal investigations of alleged crime committed by other officers or offenders, or inform local law enforcement agencies of the services offered.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to carry out the process. This includes determining how the operation will be completed. For example, positions determine the approach to test physical evidence and/or the plan or course of an investigation. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established process. For example, positions determine what evidence to collect and how to collect it. Positions also determine the approach to use in presenting information in an unbiased manner. Choices are within a range of specified, acceptable standards, alternatives, and technical practices. For example, within legal limits and alternatives, and physical and chemical techniques, positions determine whether or not probable cause exists and/or how to analyze physical evidence.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study information from crime scenes or witnesses to determine what it means and how it fits together in order to get practical solutions in the form of an approach for testing evidence

CLASS SERIES DESCRIPTION (Cont'd.)

CRIMINAL INVESTIGATOR

July 1, 2002

or a plan for conducting investigations. Guidelines in the form of standard operating procedures, statutes, report writing procedure, policy, internal manuals, and rules of evidence exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. For example, standard operating procedures may need to be adjusted to fit the situation or test. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. For example, techniques for collecting and preserving evidence change from one crime scene or investigation to another depending on the circumstances and the nature of the evidence needed to prove an alleged offense.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of any of the following:

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. For example, positions interview witnesses, informants, and suspects to uncover information on a possible offense during an investigation.

Advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions and behaviors. For example, positions in this class train local police officers in proper techniques to collect and preserve evidence which affects the outcome of an investigation.

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories or marketing a product or service. This goes beyond what has been learned in training or repeating information that is available in another format. For example, positions in this class train others in investigative concepts and techniques.

Physically restraining and arresting citizens as peace officers enforcing the law. These positions meet the criteria for the Enforcement and Protective Services occupational group. Some positions in this class series regularly carry weapons used to make field arrests. The use of weapons is governed by an active agency firearms policy that requires regular qualification with weapons. For example, such positions enforce the law at crime scenes, including the use of weapons to arrest suspects.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

CLASS SERIES DESCRIPTION (Cont'd.)

CRIMINAL INVESTIGATOR

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CRIMINAL INVESTIGATOR II

A2A3XX

CONCEPT OF CLASS

This class describes the supervisor, team leader, or staff authority. Supervisory positions are responsible for the daily operation of a lab or investigation unit which includes decisions that directly impact the pay, status, or tenure of at least three full-time equivalent positions; monitoring the status of cases; determining goals and procedures for the unit; and monitoring the unit's budget and approving equipment acquisitions. Team leaders are responsible for directing field investigations on a continuing basis, including determining and using the resources needed to complete an investigation, assigning tasks to other investigative personnel (agency or local enforcement personnel), reviewing findings and writing the content of the final report, and training other field investigators. Also included in this class is a position functioning as the agency's expert in an investigative field. Such expertise is essential to the agency's mission and is utilized on an ongoing basis as part of the position's assignment. This class differs from the Criminal Investigator I on Decision Making and possibly Line/Staff Authority.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. For example, positions in this class determine the level and use of fiscal, technical, and human resources during investigations, including directing the work of other investigators in a lab, work unit, or field investigation. The general pattern, program, or system exists but must be individualized. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. For example, positions evaluate and recommend the feasibility of adding new, or deleting current, services or types of tests. As another illustration, the expert applies the theories, principles, professional standards, and concepts of the professional field when advising or guiding peers and agency management on the identification and analysis techniques for investigations in the field of expertise. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study information from crime scenes or witnesses to determine what it means and how it fits together in order to get practical solutions in the form of an approach for testing evidence or a plan for conducting investigations. Positions also study caseloads and requests for assistance in order to schedule staff. Guidelines in the form of standard operating procedures, statutes, report writing procedure, policy, internal manuals, and rules of evidence exist for most

CLASS SERIES DESCRIPTION (Cont'd.)

CRIMINAL INVESTIGATOR

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situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. For example, standard operating procedures may need to be adjusted to fit the situation or test. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. For example, techniques for collecting and preserving evidence change from one crime scene or investigation to another depending on the circumstances and the nature of the evidence needed to prove an alleged offense.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of any of the following:

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. For example, positions interview witnesses, informants, and suspects to uncover information on a possible offense during an investigation.

Advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions and behaviors. For example, positions in this class train local police officers in proper techniques to collect and preserve evidence which affects the outcome of an investigation.

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories or marketing a product or service. This goes beyond what has been learned in training or repeating information that is available in another format. For example, positions in this class train others in investigative concepts and techniques.

Physically restraining and arresting citizens as peace officers enforcing the law. These positions meet the criteria for the Enforcement and Protective Services occupational group. In this class series, positions regularly carry weapons used to make field arrests. The use of weapons is governed by an active agency firearms policy that requires regular qualification with weapons. For example, positions in this class enforce the law at crime scenes, including the use of weapons to arrest suspects.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a team leader (individual contributor or work leader), staff authority, or unit supervisor. The work leader is partially accountable for the work product of two or more full-time equivalent positions, including timeliness, correctness, and soundness. At least one of the subordinate positions must be in the same series or at a comparable conceptual level in the Compliance Investigator series. Typical elements of direct control over other positions by a work leader include assigning tasks, monitoring progress and work flow, checking the product, scheduling work, and establishing work standards. The work leader provides input into supervisory decisions made at higher levels, including signing leave requests and approving work hours. The team leader (individual contributor) exercises many of the same responsibilities when directing field investigations, such as assigning and monitoring work, approving the

CLASS SERIES DESCRIPTION (Cont'd.)

CRIMINAL INVESTIGATOR

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product, and training and advising team members. However, the team leader does not have the employees and attendant input into supervisory decisions.

OR

The staff authority is a pacesetter who has a unique level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency's mission. It is an essential component of the work assignment that has been delegated by management to the position. This authority directly influences management decisions within an agency. For example, management relies on such a position when making decisions regarding the direction that an agency's service, policy, or program should take in the staff authority's field of expertise. Managers and peers recognize and seek this level of technical guidance and direction for the development of an agency-wide system or regarding the application of a program or system within the agency or to its clients. An agency relies on the pacesetter when making management decision regarding services in a specific field.

OR

The unit supervisor is accountable, including signature authority, for actions and decisions that directly impact the pay, status, and tenure of three or more full-time equivalent positions. At least one of the subordinate positions must be in the same series or at a comparable conceptual level in the Compliance Investigator class series. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

CRIMINAL INVESTIGATOR III

A2A4XX

CONCEPT OF CLASS

This class describes the second supervisory level responsible for organizing and directing the labs or investigative units in an agency. In addition to supervising a minimum of three full-time equivalent positions, some through at least two subordinate supervisors, positions in this class evaluate work schedules and develop work plans and objectives, evaluate equipment needs and develop spending plans, monitor the budget and approve expenditures, determine new processes or services. This class differs from the Criminal Investigator II on Complexity and possibly Line/Staff Authority.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve

CLASS SERIES DESCRIPTION (Cont'd.)

CRIMINAL INVESTIGATOR

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determining the process, including designing the set of operations. For example, positions in this class direct the work, assign cases, developing procedures, and approve budget expenditures which impact the services offered by labs or investigation sections. The general pattern, program, or system exists but must be individualized. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. For example, positions evaluate the feasibility of adding new, or deleting current, services or types of tests. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

Complexity -- The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of investigative and forensic analysis theories, concepts, and principles in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. For example, positions determine whether to add a new service or test and how to shift resources to meet requests for assistance. While general policy, precedent, or non-specific practices exist, they are inadequate so they are relevant only through approximation or analogy. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing guidelines so they can be applied to particular circumstances and to deal with emergencies. For example, positions tailor existing guidelines in order to determine how make the best use of allotted funds, staff, facilities, and equipment.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of any of the following:

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. For example, positions interview witnesses, informants, and suspects to uncover information on a possible offense during an investigation.

Advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions and behaviors. For example, positions in this class train local police officers in proper techniques to collect and preserve evidence which affects the outcome of an investigation.

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories or marketing a product or service. This goes beyond what has been learned in training or repeating information that is available in another format. For example, positions in this class work with other government officials and industry on requests for new services and to market current services or systems.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a second-level supervisor. The second-level supervisor is accountable,

CLASS SERIES DESCRIPTION (Cont'd.)

CRIMINAL INVESTIGATOR

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including signature authority, for actions and decisions that directly impact the pay, status, and tenure of three or more full-time equivalent positions. At least one of the subordinate positions must be in this class series, with at least one Criminal Investigator II, or at a comparable conceptual level in the Compliance Investigator class series. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer. The second-level supervisor may also be accountable for multiple units through the direct supervision of at least two subordinate Unit Supervisors; and, have second-level signature on performance plans and appraisals in addition to the supervisory elements described above.

CRIMINAL INVESTIGATOR IV

A2A5XX

CONCEPT OF CLASS

This class describes the position which functions as an assistant director in a law enforcement agency. Positions in this class are responsible for the daily management of a program to ensure that the agency's mission is accomplished. Work includes planning and organizing program activities, recommending agency policy related to the assigned program, developing budget requests, utilizing program resources, and supervising at least two subordinate supervisors. This class differs from the Criminal Investigator III on Decision Making, Complexity, Purpose of Contact, and possibly Line/Staff Authority.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the interpretive level, as described here. Within limits of the strategic master plan and allocated human and fiscal resources, choices involve determining tactical plans to achieve the objectives established by the higher management (strategic) level. This involves establishing what processes will be done, developing the budget, and developing the staffing patterns and work units in order to deploy staff. For example, positions in this class develop program goals and policy, plan program activities, and use program funds, staff, and technical resources to accomplish the mission of the agency. This level includes inventing and changing systems and guidelines that will be applied by others statewide. For example, a position in this class may be responsible for the development of a crime database system and its guidelines that are used by other state and local law enforcement agencies. By nature, this is the first level where positions are not bound by processes and operations in their own programs as a framework for decision making and there are novel or unique situations that cause uncertainties that must be addressed at this level. Through deliberate analysis and experience with these unique situations, the manager determines the systems, guidelines, and programs for the future. For example, positions in this class determine the systems and services offered by the program which impacts the mission of the agency.

CLASS SERIES DESCRIPTION (Cont'd.)

CRIMINAL INVESTIGATOR

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Complexity -- The nature of, and need for, analysis and judgment is strategic, as described here. Positions develop guidelines to implement a program that maintains the agency's mission. For example, positions in this class plan and direct the daily operation of a program for an agency. Guidelines do not exist for most situations. For example, positions in this class use the agency's mission, legislation, and programmatic resources to determine processes and guidelines to implement new systems in order to accomplish the mission. In directive situations, positions use judgment and resourcefulness to interpret circumstances in a variety of situations and establish guidelines that direct how a departmental/agency program will be implemented. For example, positions in this class develop goals and resource utilization plans to implement an agency's program.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of either of the following:

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories or marketing a product or service. This goes beyond what has been learned in training or repeating information that is available in another format. For example, positions in this class train others in investigative concepts and techniques.

Negotiating as an official representative of one party in order to obtain support or cooperation where there is no formal rule or law to fall back on in requiring such action or change from the other party. For example, positions in this class negotiate with local, state, and federal agencies on services to be provided by the agency. Such negotiation has fiscal or programmatic impact on the agency. In reaching settlements or compromises, the position does not have a rule or regulation to enforce but is accountable for the function. For example, in negotiating on behalf of the agency over the use of crime database systems, the position in this class cannot require its use but must convince other governmental entities to use the system.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a manager. The manager must be accountable for multiple units through the direct supervision of at least two subordinate Unit Supervisors; and, have signature authority for actions and decisions that directly impact pay, status, and tenure. Elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, second-level signature on performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

The manager may also function as a unit supervisor and is accountable for actions and decisions that directly impact the pay, status, and tenure of three or more full-time equivalent positions. In addition to the elements of formal supervision, at least one of the subordinate positions must be in the same series with at least one at the Criminal Investigator II, or at a comparable conceptual level in the Compliance Investigator series.

CLASS SERIES DESCRIPTION (Cont'd.)

CRIMINAL INVESTIGATOR

July 1, 2002

ENTRANCE REQUIREMENTS

Minimum entry requirements and general competencies for classes in this series are contained in the State of Colorado Department of Personnel & Administration web site.

For purposes of the Americans with Disabilities Act, the essential functions of specific positions are identified in the position description questionnaires and job analyses.

CLASS SERIES HISTORY

Effective 7/1/02 (DLF). EPS Consolidation Study. Added peace officer authority statement to description of occupational work. Assistant Chief, Wildlife Law Enforcement class converted into the Criminal Investigator II class. Published as proposed 5/8/02.

Revised 8/1/94 (KKF). Adjustment to factors due to class placement results.

Revised 9/1/93 (KKF). Job Evaluation System Revision project. Published as proposed 5/10/93.

Revised 1/1/92. Changed grade for Inspector CBI Agent (A7367).

Revised 7/1/90. Changed class codes, class titles, grades for Investigator I-III (A7150-A7155). Created Investigator IV (A7157).

Revised 7/1/89. Changed grade for Agent-in-Charge (A7366).

Revised 10/1/87. Changed entrance requirements for Criminal Financial Investigator Auditor (A7350), CBI Field Agent I-II (A7351-7352, A7365), Lab Agent/Criminalist (A7358-A7359). Changed class title, options, and entrance requirements for Agent-in-Charge (A7366). Changed class title and entrance requirements for Inspector CBI Agent (A7367).

Revised 7/1/87. Changed class title and grade for Investigator I (A7150-A7151), grade and relationship for Investigator II and III (A7153-55), relationship for Criminal Financial Investigator Auditor (A7350), grade for CBI Field Agent I (A7351-A7352).

Created 1/1/84. CBI Field Agent I (A7351-A7352). Changed relationship and grade for Lab Agent/Criminalist I (A7358-A7359). Changed class title and entrance requirements for CBI Field Agent II (A7365). Changed entrance requirements for Agent-in-Charge (A7366). Changed options and entrance requirements for Inspector CBI Agent (A7367).

Revised 7/1/82. Changed class title, entrance requirements, options to Investigator I and III (A7150-A7151, A7155).

Revised 10/1/81. Changed title for Criminal Financial Investigator Auditor (A7350).

Revised 2/1/81. Changed options of Investigator II (A7153).

CLASS SERIES DESCRIPTION (Cont'd.)**CRIMINAL INVESTIGATOR****July 1, 2002**

Revised 7/1/80. Changed options and entrance requirements for Investigator II (A7153).

Revised 7/1/79. Changed class title and entrance requirements for Lab Agent/Criminalist I (7358-A7359).

Created 12/1/78. Lab Agent/Criminalist I (A7358-A7359).

Created 8/1/78. Investigator II (A7153).

Created 7/1/79. Criminal Financial Investigator Auditor (A7350). Changed entrance requirements for Agent-in-Charge (A7366) and Inspector CBI Agent (A7367).

Revised 12/1/78. Changed class title and entrance requirements for CBI Field Agent II (A7365) and Agent-in-Charge (A7366).

Created 7/1/78. Investigator I (A7150-A7151) and Investigator III (A7155).

Created 12/1/77. Agent-in-Charge (A7366).

Revised 11/1/76. Changed entrance requirements for Inspector CBI Agent (A7367).

Revised 2/1/76. Changed entrance requirements for CBI Field Agent II (A7365).

Created 1/1/75. CBI Field Agent II (A7365) and Inspector CBI Agent (A7367).

SUMMARY OF FACTOR RATINGS

Class Level	Decision Making	Complexity	Purpose of Contact	Line/Staff Authority
Criminal Investigator Intern	na	na	na	na
Criminal Investigator I	Operational	Patterned	Detect, Advise, Clarify, or Restrain	Indiv. Contributor
Criminal Investigator II	Process	Patterned	Detect, Advise, Clarify, or Restrain	Team Leader* , Work Leader, Staff Authority, or Unit Supervisor
Criminal Investigator III	Process	Formulative	Detect, Advise, or Clarify	Unit Supervisor or Manager
Criminal Investigator IV	Interpretive	Strategic	Clarify or Negotiate	Manager or Unit Supervisor

*For definition of a Team Leader, see Line/Staff Authority in the description.

ISSUING AUTHORITY: Colorado Department of Personnel & Administration



STATE OF COLORADO

CLASS SERIES DESCRIPTION

July 1, 2002

COMMUNITY PAROLE OFFICER

A3C1TX TO A3C4XX

DESCRIPTION OF OCCUPATIONAL WORK

This class series includes six levels in the Enforcement and Protective Services occupational group and describes community corrections and parole work in transitioning adult and/or youth offenders, parolees, and/or chronic mentally ill or impaired (CMI) from the institutional setting back into the community. The first three levels are broadbanded into a single class.

The work ranges from the entry level case management and offender supervision up through supervisory and management levels involved with implementing programs to accomplish community corrections and parole system objectives. The work primarily deals with community-based services in the areas of education, employment, vocational training, finances, public assistance, and social and personal behaviors or actions to insure supervisory requirements are maintained. Positions perform a variety of law enforcement activities including investigations, monitoring activities, testifying in court and at hearings and before various boards, and making arrests. Positions perform case management functions, collect information, write offender case evaluations and reports, and make decisions on filing offender violation charges, and approving offender release plans. The work includes counseling offenders on behaviors, attitudes, actions, employment, residence, and treatment. Work is guided by standards set by the American Corrections Association (ACA).

Positions in this series have Peace Officer Level Ia authority, designated by state statutes and department directives, to enforce laws and physically detain or arrest others and use deadly force. Basic peace officer definitions are found in C.R.S. 18-1-901, with specific authorities found in agency supporting statutes.

INDEX: The Community Parole Officer begins on page 2, the Community Parole Team Leader begins on page 3, the Community Parole Supervisor begins on page 5, and the Community Parole Manager begins on page 7.

CLASS SERIES DESCRIPTION (Cont'd.)

COMMUNITY PAROLE OFFICER

July 1, 2002

COMMUNITY PAROLE OFFICER

A3C1TX

CONCEPT OF CLASS

This class describes three levels from the entry through the fully operational level community parole officer in a broad class concept. The work is initially designed to train positions for a higher level work assignment within this class. Positions carry out established work assignments under the guidance of officers, team leaders, and supervisors.

At the fully operational assignment level, positions are assigned a caseload of offenders to oversee their transition from incarceration to successful community living. Positions monitor offenders status to ensure program compliance and that their supervisory requirements are met. Positions work with local agencies, providers, and employers in placing or referring offenders to appropriate community based programs. Positions prepare reports and offender assessments, counsel offenders, and make recommendations on changes in conditions of community placement. Positions also arrest offenders when necessary, conduct investigations (technical to criminal), file charges, and testify in court or administrative hearings. Positions may also serve as hearing officers in administrative hearings. Positions participate in ongoing training and routinely staff cases with supervisors and team leaders.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to carry out the process. This includes determining how the operation will be completed. For example, positions decide the best way to monitor offenders' activities under varying types of contacts. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices. For example, positions decide the appropriate follow-up action when offenders deviate from the conditions of their supervision. Remedial action may range from increasing the frequency of reporting up to arresting violators with supervisory approval (ACA).

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study case information to determine what it means and how it fits together in order to get practical solutions in the form of plans on solving offender problems. Guidelines in the form of agency and ACA case management standards exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. As an example, positions choose from alternative monitoring and investigative methods.

CLASS SERIES DESCRIPTION (Cont'd.)

COMMUNITY PAROLE OFFICER

July 1, 2002

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose most of the following:

Advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions and behaviors. As an example, positions advise parole boards on decisions they make.

Physically restraining and arresting citizens as peace officers enforcing the law. These positions meet the criteria for the Enforcement and Protective Services occupational group. Positions arrest, or cause to be arrested, violators.

Defending, arguing, or justifying an agency's position in formal hearings or court where the position is an official representative of one party. For example, officers testify in formal parole board hearings as to the basis and justification for revoking parole.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team.

COMMUNITY PAROLE TEAM LEADER

A3C2XX

CONCEPT OF CLASS

This class describes the work or team leader. In addition to carrying a reduced caseload as described in the Community Parole Officer class, positions in this level train, guide, and evaluate lower-level officers' work. The work may include responsibility over offenders under the intensive supervision, fugitive investigation/apprehension, risk assessment management, or other programs.

Additionally, some positions perform work as formal hearings officers in presiding over administrative hearings. These hearings consist of the offender, his representative, the officer handling the case, and a hearing officer who decides the disposition of the case. Some positions in this class may serve as members of community corrections boards.

This class differs from the Community Parole Officer class in the Line/Staff Authority factor and may differ on the Purpose of Contact factor.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to

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carry out the process. This includes determining the reporting options for offenders. For example, positions decide the appropriate monitoring process used to train new officers. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices. For example, positions make decisions on employment and treatment plans.

Complexity -- The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of counseling theories, concepts, and principles in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. While general policy, legal precedent, or non-specific practices exist; they are inadequate so they are relevant only through approximation or analogy. As an example, positions conduct each case with different plans due to differing conditions and unforeseen problems with each offender. As existing practices may be inadequate, the positions draw upon previous, analogous cases to tailor the guidelines. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing guidelines so they can be applied to particular circumstances and to deal with emergencies such as severe violations. As an example, positions tailor intensive supervision plans to account for residency in a remote area without normal monitoring equipment.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of some of the following:

Advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions and behaviors. As an example, positions advise parole boards on decisions they make.

Physically restraining and arresting citizens as peace officers enforcing the law. These positions meet the criteria for the Enforcement and Protective Services occupational group. Positions arrest, or cause to be arrested, parole violators.

Negotiating as an official representative of one party in order to obtain support or cooperation where there is no formal rule or law to fall back on in requiring such action or change from the other party. Such negotiation has fiscal or programmatic impact on an agency. In reaching settlements or compromises, the position does not have a rule or regulation to enforce but is accountable for the function. As an example, team leaders may negotiate with other jurisdictions on agreements to monitor or assist the violators, which have fiscal impact on community parole operations.

Defending, arguing, or justifying an agency's position in formal hearings or court where the position is an official representative of one party. Positions defend the agency's position on parole revocations in formal hearings.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a work leader. The work leader is partially accountable for the work product

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of two or more full-time equivalent positions, including timeliness, correctness, and soundness. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. Typical elements of direct control over other positions by a work leader include assigning tasks, monitoring progress and workflow, checking the product, scheduling work, and establishing work standards. The work leader provides input into supervisory decisions made at higher levels, including tracking leave requests and approving work hours. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

COMMUNITY PAROLE SUPERVISOR

A3C3XX

CONCEPT OF CLASS

This class describes the first supervisory level of community parole work. Positions in this level supervise units responsible for community parole activities. Such positions assign cases to officers; monitor case management actions; resolve problems and differences of opinion on the more difficult, critical cases requiring modifications of procedures; coordinate inter-unit transfers or cooperative efforts; and, evaluate programs' effectiveness. Positions in this also level oversee units responsible for community corrections program activities. Such positions monitor community corrections management actions; resolve problems and differences of opinion on the more difficult, critical issues between correctional, judicial, and communities requiring modifications of programs or guidelines; coordinate multi-agency cooperative efforts; and evaluate offender programs' effectiveness. This class differs from the Community Parole Team Leader class in the Decision Making and Line/Staff Authority factors and may differ in the Purpose of Contact factor.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level, as described here. Within limits set by professional ACA standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of parole operations. The general pattern, program, or system exists but must be individualized. As an example, positions decide the process to use in resolving cases that are not covered by the interstate compact. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. For example, unit supervisors may establish internal audit processes to insure lower level officers are following contract management and case management principles. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

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Complexity -- The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of counseling theories, parole management concepts, and parolee supervision principles in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. As an example, unit supervisors may tailor the unit's plans for differing levels of the parolee intensive supervision program. While general parole policy, precedent, or non-specific practices exist; they are inadequate so they are relevant only through approximation or analogy. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing guidelines so they can be applied to particular circumstances and to deal with emergencies. As an example, positions may analyze the effectiveness of case management processes based on recidivism rates and adjust monitoring and counseling guidelines to fit categories of community based programs.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of any of the following:

Advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions and behaviors. As an example, positions advise parole boards and judicial agencies on actions they need to take to preclude further recidivism problems.

Physically restraining and arresting citizens as peace officers enforcing the law. These positions meet the criteria for the Enforcement and Protective Services occupational group. Although positions at this level may arrest others infrequently, they have continuing authority for such actions.

Negotiating as an official representative of one party in order to obtain support or cooperation where there is no formal rule or law to fall back on in requiring such action or change from the other party. Such negotiation has fiscal or programmatic impact on an agency. In reaching settlements or compromises, the position does not have a rule or regulation to enforce but is accountable for the function. As an example, unit supervisors may negotiate with other states on agreements to transport their parole violators, which have fiscal impact on division operations.

Defending, arguing, or justifying an agency's position in formal hearings or court where the position is an official representative of one party. As an example, positions frequently justify community corrections programs' effectiveness at hearings or justify parole supervision programs' effectiveness before the Parole Board.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a unit supervisor or staff authority. The unit supervisor is accountable, including signature authority, for actions and decisions that directly impact the pay, status, and tenure of three or more full-time equivalent positions. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

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COMMUNITY PAROLE OFFICER

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OR

The staff authority is a pacesetter who has a unique level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. It is an essential component of the work assignment that has been delegated by management to the position. This authority directly influences management decisions within an agency. For example, management relies on such a position when making decisions regarding the direction that policy or a program should take in the staff authority's field of expertise. Managers and peers recognize and seek this level of technical guidance and direction regarding the application of a program or system within the agency or to its clients. Examples might include the ACA standards coordinator position that advises the agency regarding standards and regulations to adopt that are within national guidelines, or the SORIS coordinator position that advises the agency on statutes, standards, and regulations concerning sex offender supervision or the required intensive supervision coordinator.

COMMUNITY PAROLE MANAGER

A3C4XX

CONCEPT OF CLASS

This class describes the second supervisory level. Positions in this level direct multiple units through unit supervisors for portions of the state's parole and community corrections functions. Positions at this level differ from the Community Parole Supervisor class in the factors of Decision Making, Complexity, and in Line/Staff Authority.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the interpretive level, as described here. Within limits of the strategic master plan and allocated human and fiscal resources, choices involve determining regional tactical plans to achieve the objectives established by the higher management (strategic) level. This involves establishing what program processes will be done, developing the regional budget, and developing the units' staffing patterns in order to deploy staff. This level includes inventing and changing systems and guidelines that will be applied by others statewide. For example, positions may change case management processes based on changes in sentencing statutes. By nature, this is the first level where positions are not bound by processes and operations in their own programs as a framework for decision making and there are novel or unique situations that cause uncertainties that must be addressed at this level. Through deliberate analysis and experience with these unique situations, the manager or expert determines the systems, guidelines, and programs for the future. For example, positions may decide the extent or use of the intensive supervision program in managing offenders.

Complexity -- The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of counseling theories, offender management concepts, and supervision principles in order to tailor them to develop a different

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approach or tactical plan to fit specific circumstances. As an example, unit managers may tailor the unit's plans for differing levels of the intensive supervision program. While general policy, precedent, or non-specific practices exist; they are inadequate so they are relevant only through approximation or analogy. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing guidelines so they can be applied to particular circumstances and to deal with emergencies. As an example, within their regions, positions may analyze the effectiveness of parole and community programs and the associated guidelines for officers' work with sensitivity to local community issues, and public safety and local community corrections boards' objectives.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of the following:

Advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions and behaviors. As an example, positions advise community corrections and parole boards and judicial agencies on actions they need to take to preclude further recidivism problems.

Physically restraining and arresting citizens as peace officers enforcing the law. These positions meet the criteria for the Enforcement and Protective Services occupational group. Although positions at this level may arrest others infrequently, they have continuing authority for such actions.

Negotiating as an official representative of one party in order to obtain support or cooperation where there is no formal rule or law to fall back on in requiring such action or change from the other party. Such negotiation has fiscal or programmatic impact on an agency. In reaching settlements or compromises, the position does not have a rule or regulation to enforce but is accountable for the function. As an example, positions in this class negotiate with district courts on interpretations and parole guidelines appropriate to both. This has fiscal and programmatic impact on the agency.

Defending, arguing, or justifying an agency's position in formal hearings or court where the position is an official representative of one party. Positions may argue the agency position at formal hearings on a parole board's focus or program priorities that need adjustment.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a manager or senior authority. The manager must be accountable for multiple units through the direct supervision of at least two subordinate Unit Supervisors; and, have signature authority for actions and decisions that directly impact pay, status, and tenure. Elements of formal supervision must include issuing corrective actions and initiating disciplinary actions, second level signature on performance plans and appraisals, resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

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COMMUNITY PAROLE OFFICER

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DEFINITIONS

Case management: responsible for monitoring, evaluating, counseling, and controlling the activities of offenders by observation, telephone contacts, or interviewing others to insure offenders conform the limits of their community placement conditions.

CMI: chronically mentally ill; offenders diagnosis with chronic mental illness requiring special supervision.

Community programs/corrections: as used in this class description, work related to liaison and oversight of local community programs oriented to case management of offenders under the Colorado Code of Penal Discipline. Local community boards contract for services (known as half-way houses) to monitor and supervise offenders selected for participation in the community-based programs.

Intensive supervision program: program established by statute that provides a higher level of supervision and monitoring of high-risk parolees or inmates transitioning into the community.

Interstate Compact: formal agreements between states providing guidance on responsibilities of handling inter-state movements or monitoring of offenders, offenders, and those on probation.

Parole: the conditional release from incarceration of an offender before the expiration of his/her sentence granted by the State Parole Board in which the offender is subject to the supervision of a state parole officer.

Risk assessment management (RAM): specialized program designed for more effective supervision of high-risk offenders, primarily sex offenders, CMIs, or arsonists.

Youth Offender Service (YOS): special program created for youth felons who have been convicted of Class two through six felonies involving the use, of threat of use of a deadly weapon; and habitual juvenile offenders who have committed a felony that is filed in district court.

ENTRANCE REQUIREMENTS

Minimum entry requirements and general competencies for classes in this series are contained in the State of Colorado Department of Personnel & Administration web site.

For purposes of the Americans with Disabilities Act, the essential functions of specific positions are identified in the position description questionnaires and job analyses.

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CLASS SERIES HISTORY

Effective 7/1/02 (DLF). EPS Consolidation Study. Consolidated Community Programs Specialist class series (A3A1-6) and Parole Officer class series (A3B1-6) into the Community Parole Officer series (A1C3-4). Broadbanded the previous Intern, I, and II classes into a single class and pay grade. Published as proposed 5/8/02.

Revised 9/1/93 (DLF). Separated Community Correction type of work into new class series, Community Programs Specialist. Job Evaluation System Revision project. Published 6/1/93.

Revised 7/1/91. Changed pay differential, Community Corrections Specialist (A8740-42).

Revised 7/1/87. Changed examples of work and entrance requirements (A8740-48).

Revised 7/1/81. Changed class codes, titles, relationships, entrance requirements (A8740-48).

Revised 3/1/78. Changed entrance requirements (A8740-48).

Revised 2/1/77. Changed title, Community Corrections Supervisor III (A8748).

Created 1/1/75.

SUMMARY OF FACTOR RATINGS

Class Level	Decision Making	Complexity	Purpose of Contact	Line/Staff Authority
Community Parole Officer	Operational	Patterned	Advise, Restrain or Defend	Indiv. Contributor
Community Parole Team Leader	Operational	Formulative	Advise, Restrain, Negotiate, or Defend	Work Leader
Community Parole Supervisor	Process	Formulative	Advise, Restrain, Negotiate, or Defend	Unit Supervisor or Staff Authority
Community Parole Manager	Interpretive	Formulative	Advise, Restrain, Negotiate, and Defend	Manager

ISSUING AUTHORITY: Colorado Department of Personnel & Administration



STATE OF COLORADO
CLASS SERIES DESCRIPTION
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STATE PATROL

A4A1IX TO A4A7XX

DESCRIPTION OF OCCUPATIONAL WORK

This class series uses six levels in the Enforcement and Protective Services occupational group and describes law enforcement work in the Colorado State Patrol. The purpose of this occupation is to enforce the law to protect persons and property; detect and prevent criminal activity; and maintain order. By statute, positions above the cadet level are commissioned as peace officers as found in C.R.S. 18-1-901, with specific authorities found in their agency supporting statutes or delegations made by the executive director. The agency may designate classes with paramilitary rank, such as Sergeant, Captain, Major, etc.

The work involves enforcing laws and regulations; exercising powers of custody and arrest; restraining citizens suspected of unlawful behavior; detecting criminal activity; investigating complaints, incidents, and accidents; interviewing witnesses; gathering evidence; responding to emergencies and requests for assistance; providing traffic and crowd control; writing appropriate citations and reports; participating in special enforcement, inspection, or regulatory actions or investigations; and testifying in court proceedings. The work may involve conducting safety or crime prevention training; providing first aid; or providing security escort service.

INDEX: State Patrol Intern begins on this page, State Patrol Trooper begins on page 2, State Patrol Trooper III begins on page 4, State Patrol Supervisor begins on page 5, State Patrol Administrator I begins on page 6, and State Patrol Administrator II begins on page 8.

STATE PATROL INTERN

A4A1IX

CONCEPT OF CLASS

This class describes the intern or cadet level. Positions in this level receive classroom and field training designed to familiarize them with the duties of a trooper. Under the supervision of instructors, positions participate in formal classroom training and instruction in law enforcement methods and procedures, weapons use, traffic direction and control, accident investigative techniques, first aid and rescue operations, and agency administrative and work processes.

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STATE PATROL

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FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the defined level, as described here. Within limits prescribed by the operation, choices involve selecting alternatives that affect the manner and speed with which tasks are carried out. These choices do not affect the standards or results of the operation itself because there is typically only one correct way to carry out the operation. These alternatives include independent choice of things as priority and personal preference for organizing and processing the work, proper tools or equipment, speed, and appropriate steps in the operation to apply. By nature, the data needed to make decisions can be many but are clear and understandable so logic is needed to apply the prescribed alternative. Positions can be taught what to do to carry out assignments and any deviation in the manner in which the work is performed does not change the results of the operation. For example, in training exercises, there is typically only one correct response or action, and decisions are limited to speed and priority.

Complexity -- The nature of, and need for, analysis and judgment is prescribed, as described here. Positions apply established, standard guidelines, which cover work situations and alternatives. Action taken is based on learned, specific guidelines that permit little deviation or change as the task is repeated. Any alternatives to choose from are clearly right or wrong at each step. As an example, training instructions, reference manuals, and instructor guidance clearly limit choices.

Purpose of Contact -- Regular work contacts with others, outside the supervisory chain and whatever the method of communication, are for the purpose of exchanging or collecting information with contacts. This involves giving learned information that is readily understandable by the recipient or collecting information to solve factual problems, errors, or complaints. For example, contacts are limited to giving responses learned in the training.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor.

STATE PATROL TROOPER

A4A3TX

CONCEPT OF CLASS

This class describes the fully-operational trooper. Positions in this level have primary responsibility for enforcing motor vehicle and criminal laws by patrol work that includes traffic control, investigating accidents, helping motorists with emergencies or mechanical breakdowns, and some crime prevention. Some positions in this class may perform special law enforcement assignments in such areas as hazardous materials route enforcement, interstate commercial transportation enforcement, and special security or escort duties. This class differs from the State Patrol Intern class in the Decision Making, Complexity, and Purpose of Contact factors.

CLASS SERIES DESCRIPTION (Cont'd.)

STATE PATROL

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FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to carry out the process. This includes determining how the operation will be completed. For example, positions decide appropriate means to detect commercial shipments of hazardous materials. By nature, data needed to make decisions are many and variable so reasoning is needed to develop the practical course of action within the established process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices. As an example, positions decide how and what areas to patrol in their assigned sectors based on weather, incident frequency, or accident reduction objectives.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study accident or crime information to determine what it means and how it fits together to get practical solutions in the form of accident causes or to establish evidence. As an example, positions analyze traffic accident scenes to judge contributing causes or fault. Guidelines in the form of statutes, regulations, procedures, or legal precedents exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involve choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. For example, positions choose the appropriate citation based on the existing choices.

Purpose of Contact -- Regular work contacts with others, outside the supervisory chain and despite the method of communication, are for the purpose of physically restraining and arresting citizens as peace officers enforcing the law. These positions meet the criteria for the Enforcement and Protective Services occupational group. For example, positions arrest citizens when violations dictate such action.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

STATE PATROL TROOPER III

A4A4XX

CONCEPT OF CLASS

This class describes the patrol officer in a work leader role. Positions in this level perform enforcement work in a recognized specialty area characterized by lead work over others. This class differs from the State Patrol Trooper class in the Line/Staff Authority factor only.

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STATE PATROL

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FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to carry out the process. This includes determining how the operation will be completed. For example, positions decide appropriate means to detect commercial shipments of hazardous materials. By nature, data needed to make decisions are many and variable so reasoning is needed to develop the practical course of action within the established process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices. As an example, positions decide how and what areas to patrol in their assigned sectors based on weather, incident frequency, or accident reduction objectives.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study accident or crime information to determine what it means and how it fits together to get practical solutions in the form of accident causes or to establish evidence. As an example, positions analyze traffic accident scenes to judge contributing causes or fault. Guidelines in the form of statutes, regulations, procedures, or legal precedents exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involve choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. For example, positions choose the appropriate security coverage based on the existing choices.

Purpose of Contact -- Regular work contacts with others, outside the supervisory chain and despite the method of communication, are for the purpose of physically restraining and arresting citizens as peace officers enforcing the law. These positions meet the criteria for the Enforcement and Protective Services occupational group. For example, positions arrest citizens when violations dictate such action.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a work leader or staff authority. The work leader is partially accountable for the work product of two or more full-time equivalent positions, including timeliness, correctness, and soundness. Typical elements of direct control over other positions by a work leader include assigning tasks, monitoring progress and work flow, checking the product, scheduling work, and establishing work standards. The work leader provides input into supervisory decisions made at higher levels, including signing leave requests and approving work hours. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

OR

The staff authority is a pacesetter who has a unique level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. It is an essential

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component of the work assignment that is delegated by management to the position. This authority directly influences management decisions within an agency. For example, management relies on such a position when making decisions regarding the direction that policy or a program should take in the staff authority's field of expertise. Managers and peers recognize and seek this level of technical guidance and direction regarding the application of a program or system within the agency or to its clients.

STATE PATROL SUPERVISOR

A4A5XX

CONCEPT OF CLASS

This class describes the first supervisory level. In addition to work described in lower classes, positions in this level supervise the work of three or more full time equivalent (FTE) positions. Supervisory duties include decisions that affect the pay, status, or tenure of others. This class differs from the State Patrol Trooper III class in the Decision Making and Line/Staff Authority factors.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. For example, positions decide the type of patrol activity to schedule, the coverage and man-hour allocations by activity, and the back-up support needed. The general pattern, program, or system exists but must be individualized. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents to determine their relationship to the problem. For example, positions analyze traffic accident prevention models in relation to unusual accident rates for a particular area and decide the most effective means of reducing accidents. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study accident or crime information to determine what it means and how it fits together in order to get practical solutions in the form of accident causes or to establish evidence. As an example, positions analyze traffic accident scenes to judge contributing causes or fault. Guidelines in the form of statutes, regulations, procedures, or legal precedents exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involve choosing from alternatives where all are correct but one is

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better than another depending on the given circumstances of the situation. For example, positions choose the appropriate enforcement plan based on the alternatives.

Purpose of Contact -- Regular work contacts with others, outside the supervisory chain and despite the method of communication, are for the purpose of physically restraining and arresting citizens as peace officers enforcing the law. These positions meet the criteria for the Enforcement and Protective Services occupational group. For example, positions arrest citizens when violations dictate such action.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a unit supervisor or senior authority. The unit supervisor is accountable, including signature authority, for actions and decisions that directly impact the pay, status, and tenure of three or more full-time equivalent positions. At least one subordinate position must be in the same series or at a comparable conceptual level. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

OR

The senior authority is a pacesetter who has a unique level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. It is an essential component of the work assignment that is delegated by management to the position. This authority directly influences management decisions beyond the agency. Managers and peers seek this level of technical guidance and direction as the designer of a statewide system or in a subject area for other areas of state government. Managers and peers, both internally and externally to the agency, rely on this pacesetter when making decisions regarding the direction that policy, programs, and systems should take in the pacesetter's field of expertise.

STATE PATROL ADMINISTRATOR I

A4A6XX

CONCEPT OF CLASS

This class describes the second supervisory level. Positions in this level supervise two or more subordinate supervisors and have responsibility for a designated unit (troop or staff). This responsibility includes oversight of two or more sections of troopers and entails such things as planning, scheduling, and evaluating operations. In addition to evaluating and controlling law enforcement patrol activities, positions in this class may have duties relating to oversight of facilities, communications, maintenance, and equipment. This class differs from the State Patrol Supervisor class on the Complexity, Purpose of Contact, and Line/Staff Authority factors.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

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Decision Making -- The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. As an example, positions establish processes for interagency cooperation on joint enforcement efforts. The general pattern, program, or system exists but must be individualized. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents to determine their relationship to the problem. For example, positions decide which law enforcement principle applies to special events such as road races or a special drug enforcement program. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

Complexity -- The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of law enforcement theories, concepts, and principles in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. For example, as on-scene commander, positions evaluate the importance of investigative principles versus removal of persons with injuries or casualties at large scale accidents. While general policy, precedent, or non-specific practices exist, they are inadequate so they are relevant only through approximation or analogy. Together with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing guidelines so they can be applied to particular circumstances and to deal with emergencies. For example, positions tailor existing guidelines to deal with emergencies such as back up communications plans when the primary centers are destroyed by catastrophic weather.

Purpose of Contact -- Regular work contacts with others, outside the supervisory chain and despite the method of communication, are for the purpose of negotiating as an official representative of one party to obtain support or cooperation where there is no formal rule or law to fall back on in requiring such action or change from the other party. Such negotiation has fiscal or programmatic impact on an agency. In reaching settlements or compromises, the position does not have a rule or regulation to enforce but is accountable for the function. As an example, positions negotiate highway jurisdictional agreements with local law enforcement authorities that have impact on the fiscal resources of the unit.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a manager or leading authority. The manager must be accountable for multiple units through the direct supervision of at least two subordinate Unit Supervisors; and, have signature authority for actions and decisions that directly impact pay, status, and tenure. Elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, second-level signature on performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

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OR

The leading authority is a pacesetter who has a rare level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. It is an essential component of the work assignment that is delegated by management to the position. This authority directly influences management decisions and peers in the profession outside state government. Managers and peers beyond state government recognize and seek this level of technical guidance and direction because of the recognized expertise in a subject area. For example, program managers and colleagues in other states rely on this regional or national pacesetter when making decisions regarding the direction of their policy, programs, and systems in the pacesetter's field of expertise. This reliance on, and delegation of, primary responsibility for influencing management direction, including representing the state regionally or nationally, separates this level of staff authority from all others.

STATE PATROL ADMINISTRATOR II

A4A7XX

CONCEPT OF CLASS

This class describes the third-level supervisor. Positions in this level have supervisory and administrative responsibilities directing a field district or staff branch. The work includes planning and evaluating patrol operations, interpreting patrol policies, and resolving inter-agency jurisdictional issues and problems. Positions at this level work inter-district projects and issues and are responsible for communications to and from headquarters. Those positions in a staff branch work on agency-wide projects, issues, and objectives to support field operations. This class differs from the State Patrol Administrator I class in the Decision Making, Complexity, and Line/Staff Authority factors.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the interpretive level, as described here. Within limits of the strategic master plan and allocated human and fiscal resources, choices involve determining tactical plans to achieve the objectives established by the higher management (strategic) level. This involves establishing what processes will be done, developing the budget, and developing the staffing patterns and work units to deploy staff. As an example, positions decide budget requests and work units for their district. This level includes inventing and changing systems and guidelines that will be applied by others statewide. By nature, this is the first level where positions are not bound by processes and operations in their own programs as a framework for decision making and there are novel or unique situations that cause uncertainties that must be addressed at this level. Through deliberate analysis and experience with these unique situations, the manager or expert determines the systems, guidelines, and programs for the future. As an example, a staff branch position decides the tactical plans for implementing a change in emphasis on law enforcement, such as new computerized processes of analyzing traffic accidents to determine causes.

CLASS SERIES DESCRIPTION (Cont'd.)

STATE PATROL

July 1, 2002

Complexity -- The nature of, and need for, analysis and judgment is strategic, as described here. Positions develop guidelines to implement a program that maintains the agency's mission. Guidelines do not exist for most situations. For example, positions develop agency law enforcement programs for such things as enforcing commercial trucking regulations with other agencies. In directive situations, positions use judgment and resourcefulness to interpret circumstances in a variety of situations and establish guidelines that direct how a departmental/agency program will be implemented. For example, district commanders interpret their unique district problems to set up special law enforcement actions, such as temporary site activations for commercial trucking inspections and enforcement.

Purpose of Contact -- Regular work contacts with others, outside the supervisory chain and despite the method of communication, are for the purpose of negotiating as an official representative of one party to obtain support or cooperation where there is no formal rule or law to fall back on in requiring such action or change from the other party. Such negotiation has fiscal or programmatic impact on an agency. In reaching settlements or compromises, the position does not have a rule or regulation to enforce but is accountable for the function. As an example, positions negotiate with local law enforcement jurisdictions to share communications sites, thereby sharing costs.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a third-level supervisor. The third-level supervisor must be accountable for multiple units through the direct supervision of at least two subordinate second-level supervisors; and, have signature authority for actions and decisions that directly impact pay, status, and tenure. Elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, second level signature on performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

ENTRANCE REQUIREMENTS

Minimum entry requirements and general competencies for classes in this series are contained in the State of Colorado Department of Personnel & Administration web site.

For purposes of the Americans with Disabilities Act, the essential functions of specific positions are identified in the position description questionnaires and job analyses.

CLASS SERIES HISTORY

Effective 7/1/02 (DLF). EPS Consolidation Study. Changed class title from Patrol Intern to State Patrol Intern, Patrol Trooper to State Patrol Trooper, Patrol Trooper III to State Patrol Trooper III, Patrol Supervisor to State Patrol Supervisor, Patrol Administrator I to State Patrol Administrator I, Patrol Administrator II to State Patrol Administrator II. Published as proposed 5/8/02.

CLASS SERIES DESCRIPTION (Cont'd.)**STATE PATROL****July 1, 2002**

Revised 7/1/00 (DLF). Change grade on Patrol Intern (A4A1), abolish Patrol Trooper I (A4A2TX), change title and class code of Trooper II (A4A3XX) to Patrol Trooper (A4A3TX) class. Published as proposed 12/1/99. All pay grades changed to reflect statutory change.

Revised 9/1/93 (DLF). Job Evaluation System Revision project. Published as proposed 5/24/93.

Revised 10/1/87. Nature of work and entrance requirements (A7340-62).

Revised 7/1/79. Title and nature of work (A7361 and A7362).

Revised 1/1/79. Examples of work and entrance requirements (A7343 - A7348).

Created 10/1/76. State Patrol Cadet A7340.

Created 1/1/75. Trooper A through Patrol Captain (A7343-62).

SUMMARY OF FACTOR RATINGS

Class Level	Decision Making	Complexity	Purpose of Contact	Line/Staff Authority
State Patrol Intern	Defined	Prescribed	Exchange	Indiv. Contributor
State Patrol Trooper	Operational	Patterned	Restrain	Indiv. Contributor
State Patrol Trooper III	Operational	Patterned	Restrain	Work Leader or Staff Authority
State Patrol Supervisor	Process	Patterned	Restrain	Unit Supervisor or Senior Authority
State Patrol Administrator I	Process	Formulative	Negotiate	Manager or Leading Authority
State Patrol Administrator II	Interpretive	Strategic	Negotiate	Senior Manager

ISSUING AUTHORITY: Colorado Department of Personnel & Administration



STATE OF COLORADO

CLASS SERIES DESCRIPTION

July 1, 2002

AIR NATIONAL GUARD PATROL OFFICER

A9A1TX TO A9A3XX

DESCRIPTION OF OCCUPATIONAL WORK

This class series uses three levels in the Enforcement and Protective Services occupational group and describes physical security and law enforcement work for personnel and resources assigned or attached to the Air National Guard (ANG). The work involves detecting problems and violations, reporting incidents or events, and implementing corrective actions on threats to the safety of resources. Positions maintain law and order by enforcing federal laws, state statutes, Air Force and National Guard regulations, and the Uniform Code of Military Justice. The law enforcement authorities for positions in these classes are found in federal guidelines and are considered equivalent to Peace Officer Level II as found in CRS 18-1-901.

NOTE: Agencies may use para-military rank for positions in these classes.

INDEX: ANG Patrol Officer I begins on this page, ANG Patrol Officer II begins on page 2, ANG Patrol Officer III begins on page 3.

ANG PATROL OFFICER I

A9A1TX

CONCEPT OF CLASS

This class describes the fully operational patrol officer. Positions in this level provide armed protection of aircraft, firearms, munitions, and other property or equipment. Positions maintain installation security and enforce laws by patrol and observation. The work includes responding to alarms and calls, detaining suspects, dispatching patrols, issuing citations, preparing reports and logs, and answering inquiries or calls. Positions interview witnesses and suspects, take statements, advise citizens of their rights, and collect and maintain evidence. Positions entering this class may receive orientation and training to the work but are expected to be fully operational within the initial probationary period.

CLASS SERIES DESCRIPTION (Cont'd.)

ANG PATROL OFFICER

July 1, 2002

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to carry out the process. This includes determining how the operation will be completed. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices. As an example, positions decide how to respond to suspicious or unlawful activities and when to request assistance.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study specific security incident information to determine what it means and how it fits together in order to get practical solutions in the form of judgments on whether violations have occurred or not. Guidelines in the form of regulations and security procedures exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines that may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. For example, positions choose the appropriate security response based on the available options under certain security alert conditions.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of physically restraining and arresting citizens as peace officers enforcing the law. These positions meet the criteria for the Enforcement and Protective Services occupational group. For example, positions detain suspects after apprehension for possible violations of the law.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

ANG PATROL OFFICER II

A9A2XX

CONCEPT OF CLASS

This class describes the lead patrol officer. In addition to work described by the lower class in this series, positions in this class have work leader responsibility over other positions performing patrol work. This class differs from the ANG Patrol Officer I in the Line/Staff Authority factor only.

CLASS SERIES DESCRIPTION (Cont'd.)

ANG PATROL OFFICER

July 1, 2002

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to carry out the process. This includes determining how the operation will be completed. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices. As an example, positions decide how to respond to suspicious activities and direct others in that response.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study specific security incident information to determine what it means and how it fits together in order to get practical solutions in the form of judgments on whether violations have occurred or not. Guidelines in the form of regulations and security procedures exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines that may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. For example, positions choose the appropriate law enforcement or security response based on the available options under certain security alert conditions.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of physically restraining and arresting citizens as peace officers enforcing the law. These positions meet the criteria for the Enforcement and Protective Services occupational group. For example, positions detain suspects after apprehension for possible violations of the law.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a work leader. The work leader is partially accountable for the work product of two or more full-time equivalent positions, including timeliness, correctness, and soundness. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. Typical elements of direct control over other positions by a work leader include assigning tasks, monitoring progress and workflow, checking the product, scheduling work, and establishing work standards. The work leader provides input into supervisory decisions made at higher levels, including signing leave requests and approving work hours. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

ANG PATROL OFFICER III

A9A3XX

CONCEPT OF CLASS

This class describes the first supervisor level. In addition to work described in lower classes in this series, positions in this level have responsibility for actions that may impact the pay, status, or

CLASS SERIES DESCRIPTION (Cont'd.)

ANG PATROL OFFICER

July 1, 2002

tenure of other positions. This class differs from the ANG Patrol Officer II class in the Line/Staff authority factor only.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to carry out the process. This includes determining how the patrol and security operation will be completed. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices. For example, positions decide the appropriate dispatching of personnel to respond to more than one suspicious activity or hostile event while at the same time determining the right amount of force necessary to counter the threat while preserving minimum resources.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study security incident reports and information to determine what it means and how it fits together in order to get practical solutions in the form of security alert options and the appropriate security responses. Guidelines in the form of regulations and security procedures/conditions/options exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines that may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. For example, positions use judgment to assess the type of violation, the seriousness of it, and the appropriate neutralizing response.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of physically restraining and arresting citizens as peace officers enforcing the law. These positions meet the criteria for the Enforcement and Protective Services occupational group. For example, positions detain suspects or direct their restraint or apprehension following suspicious activities.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a unit supervisor. The unit supervisor is accountable, including signature authority, for actions and decisions that directly impact the pay, status, and tenure of three or more full-time equivalent positions. Positions must be in this series or at a comparable conceptual level in federal classes. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

CLASS SERIES DESCRIPTION (Cont'd.)

ANG PATROL OFFICER

July 1, 2002

ENTRANCE REQUIREMENTS

Minimum entry requirements and general competencies for classes in this series are contained in the State of Colorado Department of Personnel & Administration web site.

For purposes of the Americans with Disabilities Act, the essential functions of specific positions are identified in the position description questionnaires and job analyses.

CLASS SERIES HISTORY

Effective 7/1/02 (DLF). Reviewed as part of EPS Consolidation Study; only date and class history updated. Published as proposed 5/8/02.

Revised 7/1/01 (KKF). ANG Patrol Officer IV (A9A4) abolished as part of the annual elimination of vacant classes. Published as proposed 5/10/01.

Revised 4/30/97 (DLF). ANG Patrol Officer IV (A9A4XX) added to series. Published as proposed 3/21/97.

Revised 9/1/95 (DLF). ANG Patrol Officer III class (A9A3XX) added to series. Published as proposed 8/1/95.

Effective 9/1/93 (DLF). Job Evaluation System Revision project. Published as proposed 5/20/93.

Created 11/1/90. ANG Patrol Officer (7315).

SUMMARY OF FACTOR RATINGS

Class Level	Decision Making	Complexity	Purpose of Contact	Line/Staff Authority
ANG Patrol Officer I	Operational	Patterned	Restrain	Individual Contributor
ANG Patrol Officer II	Operational	Patterned	Restrain	Work Leader
ANG Patrol Officer III	Operational	Patterned	Restrain	Unit Supervisor

ISSUING AUTHORITY: Colorado Department of Personnel & Administration



SYSTEM MAINTENANCE STUDY

NARRATIVE REPORT – FINAL CHANGES

CLINICAL THERAPIST

Class Codes C5J1IX-C5J5XX

Conducted Fiscal Year 2001-2002

BACKGROUND AND PURPOSE OF STUDY

This system-wide study is part of the Department of Personnel and Administration's (hereafter "the department") statutory responsibility, CRS 24-50-104(1)(b), for maintaining and revising the system of classes covering all positions in the state personnel system. Such maintenance may include the assignment of appropriate pay grades that reflect prevailing wage as mandated by CRS 24-50-104(1)(a). The focus and purpose of this study was to review the survey matches and assigned pay grades for the Clinical Therapist class series.

The issue of the appropriate pay grade for Clinical Therapists was first raised during the Health Care Services Consolidation study conducted in 2000-2001. During that study, consideration was given to consolidating all therapy disciplines, including physical, occupational, speech, recreation, music, and deaf/blind into a single "Therapist" class series because therapists perform similar work in terms of assessing client pathology and rehabilitative potential, planning and providing treatment, evaluating results, and recording client progress. However, this was not feasible due to market data supporting a substantial difference in pay for clinical therapist and the remaining therapy disciplines. Consequently, the Clinical Therapists series was retained and no changes to pay grades were recommended. The Clinical Therapist II class is a survey class and matched with the market in the Mountain States Employer's Council and Colorado Hospital Association third-party surveys. The last system maintenance study on this series prior to the HCS consolidation was completed in FY 95-96 and made pay grade adjustments to bring the pay grades for the series into alignment with the market. Since that study was implemented on July 1, 1996, market data has shown the state's salaries to be in alignment.

During one of the meet and confer meetings set to discuss the proposed Health Care Services class consolidation, the issue of appropriate pay for Clinical Therapist was raised. Concern was voiced regarding the third-party survey capsule descriptions and whether or not the data being reported through the third-party sources was for activities coordinators or recreation therapists. Based on the issue presented, the occupational specialist agreed to conduct a direct survey as follow-up to the consolidation study.

METHODOLOGY

Capsule descriptions and a survey instrument were developed to collect market compensation data on the Clinical Therapist occupation. The survey included three classes, the full-operating Clinical Therapist, the supervisory level, and on Activities Coordinator. The state does not hire Activities Coordinators; however, both Activities Coordinator and Clinical Therapist were included in the survey to address the issue raised of whether the salaries reported through the third-party survey were for activities programs or true therapy. In an effort to collect market data on only therapist positions, a capsule description was written to describe these two jobs separately in hope of gathering data on both types of positions. A subject matter expert (SME) helped refine the capsule descriptions to be certain that distinctions between the Clinical Therapist and Activities Coordinator accurately described the nature of work of these two types of jobs. In addition to refining capsule descriptions, the SME also identified private sector firms to be included in the survey that employ recreational therapists performing similar work, including the severity of client condition, as that performed by state employees.

Once the survey instrument was developed, it was published through the “meet and confer” process. Statute requires directly affected employees and employee organizations be notified of proposed changes to the system including supplemental surveys prior to finalization and implementation. By Director’s Administrative Procedure, notice to employees shall be provided by appointing authorities. Agency human resource (HR) administrators are responsible for providing this information to their respective appointing authorities. On January 24, 2002, the supplemental survey was first sent to the Total Compensation Advisory Council (TCAC) for comments. No comments were received. On January 31, 2002, the notice of the supplemental survey and “meet and confer” was sent to HR offices in the three districts of the Department of Human Services, Colorado State University, University of Colorado Health Sciences Center, Department of Corrections, and the SME involved in writing the capsule description via e-mail. The notice was also faxed to all HR administrators and the three employee organizations on the same date.

The “meet and confer” meeting was scheduled and held on February 13, 2002, in Denver. Eleven participants attended the meeting. Comments from the meeting included a number of recommended changes to the survey document including several wording changes, changing the capsule title for the Clinical Therapist to “Rehabilitation Therapist”, adding a question on whether compensation differs for security and non-security settings, and adding a question on the severity of client disorders. The list of identified survey firms was also discussed. Participants were asked to provide additional firm names to be included in the survey by the close of “meet and confer”, February 15, 2002. A list of firms from the Joint Commission on Accrediting Healthcare Organizations website was provided.

The survey was finalized according to the feedback received through “meet and confer” and mailed to 27 firms on February 22, 2002. Survey responses were due by March 1st. Due to low response rate, internet research was done to identify additional hospitals, long-term care facilities, and behavioral care facilities for participation in the survey. Through this effort, the survey was faxed, mailed, and e-mailed to an additional 75 firms across Colorado. Over a three week period, staff called each of the total 102 firms that did not respond to the survey to request the information verbally. Through the mail, e-mail, fax, and telephone contacts, responses were collected from a total of 49 firms. Of these, seven firms provided data. Thirty-six firms indicated they do not hire recreation or rehabilitation therapists.

ISSUES AND FINDINGS

Only four firms matched the full-operating Rehabilitation Therapist capsule and provided salary range data. A comparison of the midpoint for this limited data and the state midpoint shows the state to be 6.1% higher. Three firms reported data for the Activities Therapist, which is not enough information to draw a conclusion on how compensation for this type of work compares with the full-operating therapist. For the supervisory level, three firms reported data; however, two of the matches are questionable due to required licensure as a social worker, physical therapist, or occupational therapist and were discarded. Due to the low response rate, the data is inconclusive.

Due to a lack of sufficient data, there is no justification for making changes to the pay grades assigned to the Clinical Therapist class series. Since the data collected through the supplemental survey is inconclusive, the department will continue to rely on its data sources used in the annual Total Compensation Survey to set the pay grades for these classes. Third-party survey data shows the state’s midpoint for the Clinical Therapist II class to be approximately 8.56% above the market. For the previous four years, the survey data showed the class between 0.15% and 1.83% above the market. The published Total Compensation Survey Procedures contain specific criteria that determine when a pay difference between the state and market should be addressed. These criteria include: (1) the magnitude of the difference (+/- 7.5%), (2) stability of difference from one year to the next, (3) duration of the difference, (4) nature of the labor market sample for the survey class (types of labor market, number and size of firms reported), (5) historical pay relationships between classes, (6) reported recruiting and retention difficulty, and (7) significant market trend differences in pay practices. Because this is the first year the class is outside of the tolerance zone (+/- 7.5%) and no trend has been established, maintaining the current pay grades for these classes is appropriate.

A survey of facilities in other states was conducted by a clinical therapist in the Department of Human Services and provided for consideration in the pay analysis. This type of information cannot be used as the basis for salary recommendations for several reasons. According to the Total Compensation Survey procedures and the criteria for survey selection this survey does not meet several of the selection criteria: it does not provide adequate descriptions of work to match state classes; it does not explain its methodology for sample selection; and it is not a published survey conducted by a third party. In addition, regional data can only be used if adequate geographic differential measurements are reported. Geographic measurement differentials are a

method used to adjust salaries to specific labor market so that economic factors are reflected. Without well documented geographic differential measurements, regional data can only be used as a reference. One way that regional data can be used is to establish pay relationships between classes (e.g., the difference in pay between clinical therapist and occupational therapist); however, this independent survey does not include data on any other classes and so cannot be used for this purpose.

Pay relationship information from the Central States Compensation Conference Survey for clinical therapy and occupational therapy disciplines was analyzed to determine how other states compensate these positions in relation to one another. In this case, the selected benchmark job for the pay relationship comparison is the full-operating Occupational/Physical Therapist. A comparison between the salaries of the full-operating Clinical Therapist and Occupational/Physical Therapist classes shows an average 22% pay difference (Occupational/Physical Therapist is 22% higher than Clinical Therapist). Looking at the pay differential between Colorado's Occupational/Physical Therapist and Clinical Therapist classes, the pay difference is 19% (Occupational/Physical Therapist is 19% higher than Clinical Therapist). This comparison shows that the salaries for these two occupations in the state personnel system have similar internal alignment as found in other states and provides no justification for changing this relationship.

In conclusion, there is no data to support that the salaries for Clinical Therapists are under the market salaries for similar positions. Without sufficient, valid data to justify making a change, the existing pay grades for these classes will continue:

Class	Pay grade
Clinical Therapist I	C33
Clinical Therapist II	C37
Clinical Therapist III	C41
Clinical Therapist IV	C50
Clinical Therapist V	C54

MEET AND CONFER ON PROPOSED RESULTS

CRS 24-50-104(1)(b) requires the department to meet and confer with affected employees and employee organizations, if requested, regarding the proposed changes before they are implemented as final. The official notice of proposed changes contained a deadline by which all "meet and confer" activity must conclude in order to implement the recommendations on 7/1/2002. In an effort to proactively facilitate this process, one public meeting was scheduled for May 21, 2002. The notice of "meet and confer" was included in the JEL 02-07 document that was released on May 14, 2002 and posted on the DHR website. The notice was also sent via fax and e-mail to agency HR administrators, and the three employee organizations on the same date.

Two employees from the Department of Human Services, one staff member from the Total Compensation & Systems team, and the occupational specialist attended the "meet and confer" meeting. An explanation of the study and the results of the direct survey were provided by the

occupational specialist. There was expressed disappointment in the low response rate and lack of data.

The majority of questions during “meet and confer” focused on the salary data and capsule descriptions in the third-party survey sources which have been previously addressed in this narrative.

Issues with recruiting, retention, the size of applicant pools for vacant positions, and residency waivers were raised. Though these issues are outside the scope of this study, managers are encouraged to work with their HR offices to explore the use of the various flexible compensation tools e.g., hazard duty pay and discretionary pay differentials in addressing recruiting/retention issues with these classes. Residency waivers must be requested through the State Personnel Board.

FISCAL IMPACT FOR IMPLEMENTATION YEAR

There is no fiscal impact from this study as no change is recommended.

RECOMMENDATIONS

I. Occupational Group

No change. These classes remain in the Health Care Services (HCS) Occupational Group.

II. Class Descriptions

No change.

III. Class Conversion and/or Placement

Not applicable.



STATE OF COLORADO
CLASS SERIES DESCRIPTION
July 1, 2002

VETERINARIAN

C9BK1XX TO C9BK3XX

DESCRIPTION OF OCCUPATIONAL WORK

This class series uses three levels in the Health Care Services Occupational Group and describes professional work in the field of veterinary medicine. Positions in this class series apply the principles, theories, and practices of veterinary science. By statutes CRS 12-64-101 et. seq., a license is required in this class series.

Veterinarians detect, diagnose, control or prevent infectious and contagious animal and livestock diseases; investigate and prevent cruelty and mistreatment of animals; and, regulate animal by-products to detect and prevent the sale of unsafe by-products to consumers. The work involves providing professional advice to local government agencies, practicing veterinarians, private sector industries (agricultural, livestock, and racing), and the general public; inspecting feedlots, auction markets, kennels, race tracks, and slaughter plants to obtain compliance with state and federal government health regulations, and civil and criminal codes; ordering appropriate laboratory tests and initiating animal quarantine restrictions; recommending prosecution or other legal actions to obtain compliance with statutes, codes, and regulations; and testifying in legal proceedings as an expert witness to defend agency policies, procedures, and actions.

INDEX: Veterinarian I begins on this page, Veterinarian II begins on page 3, Veterinarian III begins on page 4.

VETERINARIAN I

C9B1XX

CONCEPT OF CLASS

This class describes the fully operational veterinarian. Positions operate independently in performing the full range of professional tasks. Work requires the use of discretion and

CLASS SERIES DESCRIPTION (Cont'd.)

VETERINARIAN

July 1, 2002

creativity within limits of theory and principles of the profession, management's program objectives, law and regulations, and general systems and guidelines. Judgment is used in the adaptation and skilled application of guidelines to solve the full range of problems related to the assignment. An employee in this class must anticipate and analyze the impact and consequences of decisions made. This level also includes positions receiving orientation to the agency setting within the initial probationary period.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. The general pattern, program, or system exists but must be individualized. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

Complexity -- The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of theories, concepts, and principles in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. While general policy, precedent, or non-specific practices exist, they are inadequate so they are relevant only through approximation or analogy. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing guidelines so they can be applied to particular circumstances and to deal with emergencies.

Purpose of Contact -- The purpose of contacts with outside the supervisory chain, regardless of the method of communication, are for the purpose of clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories. This goes beyond what has been learned in training or repeating information that is available in another format.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor or staff authority. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

OR

CLASS SERIES DESCRIPTION (Cont'd.)

VETERINARIAN

July 1, 2002

The staff authority is a pacesetter that has a unique level of technical expertise in a field or profession that, as part of the ongoing permanent assignment, is critical to the success of an agency. It is an essential component of the work assignment that has been delegated by management to the position. This authority directly influences management decisions within an agency. For example, management relies on such a position when making decisions regarding the direction that policy or a program should take in the staff authority's field of expertise. Managers and peers recognize and seek this level of technical guidance and direction regarding the application of a program or system within the agency or to its clients.

VETERINARIAN II

C9B2XX

CONCEPT OF CLASS

This class describes the first-level of program supervision, including the unit supervisor or the senior authority. Program supervisors manage the daily operation of a work unit that includes determining the annual business plans that integrate with the agency's mission and goals, determining implementation policies and guidelines, developing budgets, establishing staffing and directly controlling the work of others. Senior authorities possess a unique level of knowledge and expertise in a professional field that is needed by the agency to support its overall mission. Management, inside and/or outside of the agency, routinely relies on the essential consultation of the authority before deciding broad, critical program and policy direction. The consultation provided is accepted as fact and not refuted on its technical merit, even if management does not act on it for political or budgetary reasons. Authorities are authorized to take action and issue expert opinions that provide direction for further action by others. Authorities design strategy, systems, processes, guidelines, rules, and standards that are mission critical and directly impact the agency's ongoing operation and broad program or policy. Senior authority is delegated by agency management, beyond the immediate supervisor, and has direct influence and impact beyond the agency. Veterinarian II differs from Veterinarian I on Decision Making and Line/Staff Authority.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the interpretive level, as described here. Within limits of the strategic master plan and allocated human and fiscal resources, choices involve determining tactical plans to achieve the objectives established by the highest management level. This involves establishing what processes will be done, developing the budget, and developing the staffing patterns and work units in order to deploy staff. This level includes inventing and changing systems and guidelines that will be applied by others statewide. By nature, this is the first level where positions are not bound by processes and operations in their own programs as a framework for decision making and there are novel or unique situations which cause uncertainties that must be addressed at this level. Through deliberate analysis and experience with these unique situations, the manager determines the systems, guidelines, and programs for the future.

CLASS SERIES DESCRIPTION (Cont'd.)

VETERINARIAN

July 1, 2002

Complexity -- The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of theories, concepts, and principles in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. While general policy, precedent, or non-specific practices exist, they are inadequate so they are relevant only through approximation or analogy. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing guidelines so they can be applied to particular circumstances and to deal with emergencies.

Purpose of Contact -- The purpose of contacts with outside the supervisory chain, regardless of the method of communication, are for the purpose of clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories. This goes beyond what has been learned in training or repeating information that is available in another format.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a unit supervisor or senior authority. The unit supervisor is accountable, including signature authority, for actions and decisions that directly impact pay, status, and tenure of three or more full-time equivalent positions. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

OR

The senior authority is a pacesetter that has a unique level of technical expertise in a field or profession that, as part of the ongoing permanent assignment, is critical to the success of an agency. It is an essential component of the work assignment that has been delegated by management to the position. This authority directly influences management decisions beyond the agency. Managers and peers seek this level of technical guidance and direction as the designer of a statewide system or in a subject area for other areas of state government. Managers and peers, both internally and externally to the agency, rely on this pacesetter when making decisions regarding the direction that policy, programs, and systems should take in the pacesetter's field of expertise.

VETERINARIAN III

C9B3XX

CONCEPT OF CLASS

This class describes the second-level program supervisor. Positions manage the daily operation of multiple work units through subordinate professional program supervisors. Positions determine the annual business plans that integrate with the agency's mission and goals, determine implementation policies and guidelines, develop budgets, establish staffing and directly control the work of others as a second-level supervisor. Work involves directing the

CLASS SERIES DESCRIPTION (Cont'd.)

VETERINARIAN

July 1, 2002

implementation of policies, rules, and regulations. This class differs from Veterinarian II on Decision Making, Complexity, and Line/Staff Authority.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the programmatic level, as described here. Within limits set by organizational policy, general directives, overall goals and objectives, and allocated resources, choices involve formulating or adjusting programs, specifying program objectives, and allocating human and fiscal resources among constituent programs. This involves independently, and under conditions of uncertainty, determining what has been done, what can be done, proposals for long-term policy, and estimates of what new resources are required. The long-term strategic plans, purposes, and staffing determined by this level require integration with other programs in the overall agency plan. Program, as used here, is defined by the mission of an agency or division as opposed to a segment or piece of a program, such as planning, program evaluation, etc. This level does not describe positions that are applying a program controlled by another agency, which has the authority and accountability for it.

Complexity -- The nature of, and need for, analysis and judgment is strategic as described here. Positions develop guidelines to implement a program that maintains the agency's mission. Guidelines do not exist for most situations. In directive situations, positions use judgment and resourcefulness to interpret circumstances in a variety of situations and establish guidelines that direct how an agency program will be implemented.

Purpose of Contact -- The purpose of contacts with outside the supervisory chain, regardless of the method of communication, are for the purpose of clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories. This goes beyond what has been learned in training or repeating information that is available in another format.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a second level supervisor. The second-level supervisor must be accountable for multiple units through the direct supervision of at least two subordinate unit supervisors, and have signature authority for actions and decisions that directly impact pay, status, and tenure. Elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, second-level signature on performance plans and appraisals, and resolving informal grievances. Positions start the hiring process interview applicants, and recommend hire, promotion, or transfer.

ENTRANCE REQUIREMENTS

Minimum entry requirements and general competencies for classes in this series are contained in the State of Colorado Department of Personnel & Administration web site.

CLASS SERIES DESCRIPTION (Cont'd.)

VETERINARIAN

July 1, 2002

For purposes of the Americans with Disabilities Act, the essential functions of specific positions are identified in the position description questionnaires and job analyses.

CLASS SERIES HISTORY

Effective 7/1/02 (LLB). HCS Consolidation Study. Changed pay grades and revised class description. Draft published 2/21/01. Published as proposed 5/10/01.

Effective 9/1/93 (KAS). Job Evaluation System Revision project. Converted Field Veterinarian A and B (55502-3) to Veterinarian I (C2K1), converted Assistant State Veterinarian (55504) and Racing Commission Veterinarian (55514) to Veterinarian II (C2K2), and converted State Veterinarian (55506) to Veterinarian III (C2K3). Published as proposed 4/9/93.

Revised 10/1/91. Changed occupational group from Medical to Health Care Services.

Revised 7/1/88. Changed relationship for State Veterinarian (55506).

Revised 7/1/82. Changed relationship for State Veterinarian (55506).

Revised 7/1/81. Changed relationship for State Veterinarian (55506).

Revised 3/1/77. Changed necessary special requirement for Field Veterinarian A and B (55502-3), Assistant State Veterinarian (55504) and State Veterinarian (55506).

Created 1/1/77.

SUMMARY OF FACTOR RATINGS

Class Level	Decision Making	Complexity	Purpose of Contact	Line/Staff Authority
Veterinarian I	Process	Formulative	Clarify	Indiv. Contributor or Staff Authority
Veterinarian II	Interpretive	Formulative	Clarify	Unit Supervisor or Senior Authority
Veterinarian III	Programmatic	Strategic	Clarify	Manager

ISSUING AUTHORITY: Colorado Department of Personnel & Administration



SYSTEM MAINTENANCE STUDY

NARRATIVE REPORT -- FINAL CHANGES

POLICE COMMUNICATIONS

Class Code G1A1IX through G1A3XX

Conducted Fiscal Year 2002-2003

BACKGROUND AND PURPOSE OF STUDY

This system-wide study is part of the Department of Personnel and Administration's (hereafter "the department") statutory responsibility, CRS 24-50-104(1)(b), for maintaining and revising the system of classes covering all positions in the state personnel system. Such maintenance may include the assignment of appropriate pay grades that reflect prevailing wage as mandated by CRS 24-50-104(1)(a). The state personnel director has delegated authority for system studies to the Division of Human Resources (hereafter "the division"). This study was done to verify the appropriate occupational group for the series, to assure accurate pay alignment for the Police Communications class series, and to study the appropriateness of adding a work leader class to the series.

The issues of the appropriate occupational group and the need for a work leader class were raised as a result of communication with human resource (HR) administrators and incumbents. The issue of the appropriate pay grades was identified during the annual evaluation of salary survey data. The published Total Compensation Survey Procedures contain specific criteria that determine when a pay difference between the state and the market should be addressed. These criteria include: (1) the magnitude of the difference (+/- 7.5%), (2) stability of the difference from one year to the next, (3) duration of the difference, (4) nature of the labor market sample for the survey class (types of labor market, number and size of firms reported), (5) historical pay relationships between classes, (6) reported recruiting and retention difficulty, and (7) significant

market trend differences in pay practices.

Available salary data from the past three survey cycles were examined for the Police Communications Technician and Supervisor classes. Only the supervisor class has shown a consistent trend of being below the market. The Police Communications Technician class has been consistent with the market mid-point. Survey data is not available for the intern class.

METHODOLOGY

The study was announced in December 2001 to agency HR administrators, via email. The announcement was also published in the January issue of *The Advisor*. Based on data collected from EMPL and from telephone contact with Colorado State University and the University of Colorado; as of March 18, 2002, nine agencies, including Colorado State University and the University of Colorado employ Police Communications staff. There were 20 filled and six vacant intern positions, 120 filled and 13 vacant technician positions, and 19 filled (no vacant) supervisor positions.

An email questionnaire was sent to all state agencies employing Police Communications positions. The questionnaire included questions regarding the accuracy of the state class description in relation to actual work duties, recruiting or retention issues, and open-ended questions requesting information regarding any other relevant issues or problems with these classes. After responses to the original questionnaire were received, several agencies were contacted by phone to obtain clarification. The University of Colorado campuses and Colorado State University were called to obtain information regarding the number of employees in these classes, since reliable data for these institutions is not available through EMPL. Additional clarification was obtained from the Department of Public Safety and Colorado State University concerning their requests for the creation of a work leader class. In order to observe Police Communications positions under normal working conditions, a site visit to the Denver Communications Center of the Department of Public Safety was conducted in January 2002.

The salary data trends from the last three survey cycles were reviewed and evaluated to determine appropriate pay grades for the class series. The survey match was verified by collecting job descriptions from most of the jurisdictions that provided salary data in the Colorado Municipal League (CML) survey. These were then compared to the state class description.

ISSUES AND FINDINGS

Occupational Group

There were requests from the Department of Public Safety and Colorado State University to move the Police Communications series out of the Administrative Support and Related (ASR) occupational group into the Enforcement and Protective Services (EPS) occupational group. They believe that because Police Communications employees work closely with patrol officers, often work in a stressful environment, make critical decisions, and provide emergency medical instruction, they should be included in the same occupational group as law enforcement officers. This request has been made periodically since occupational groups were created in 1987.

An occupational group is a broad group of similar occupations performing work that is closely enough related to be treated alike in terms of compensation and pay practices. In addition to the nature of work, the criteria for designation to a particular occupational group include:

- The education and experience required for entry into the occupation,
- The learning time typically required to move from entry to a full-operating level,
- The labor market from which the candidates for positions are drawn,
- The pay practices of the various occupations,
- Advancement patterns in the occupations.

An excerpt from the definition of the ASR occupational group follows: “The work involves various degrees of interpretation and application of instructions and guidelines where the primary emphasis is on processing of information; operating equipment to produce data and documents or to facilitate communication; or coordinating office activities, practices, and procedure. The work requires a combination of practical knowledge and skills generally gained through on-the-job training and/or relatively short training courses in a specific skill or equipment operation.”

The EPS occupational group includes occupations that “perform services where Peace Officer Level I or Level II status is granted by statute with the authority and duty to enforce criminal laws and are responsible for the prevention, detection, and investigation of crime ... Training and skill in the use of weapons is required ... Employees must satisfy requirements set forth in statute to carry out their commission and duties, and generally require certification by the Peace Officers Standards and Training Board.”

The Police Communications class series describes work operating radio consoles and computer terminals to receive, record, and transmit police communications. Tasks include receiving notification and complaints from the public concerning crime or emergencies, evaluating the urgency of the complaint, broadcasting information to patrol units who investigate, relaying instructions or questions, and monitoring the status and location of officers. These positions fully meet the definition of the ASR occupational group in that their primary role is to receive and process communications by following specific instructions, guidelines and procedures. Work is performed by operating a variety of communication equipment and producing records of contacts with officers and the public.

Police Communications positions are not designated peace officer status, which includes preventing, detecting, or investigating crime. They do not have authority to make arrests; enforce laws; serve warrants, notices or summons; or direct, control and regulate traffic. The EPS occupational group is intentionally limited to statutory peace officers (Level I and II). The issue of the correct occupational group for Police Communications was raised in 1987 when the occupational groups were created. A formal appeal was filed at that time, and the director’s decision upheld placement of the Police Communications class series in the ASR occupational group. There have been no substantial changes to the nature of work of these positions to warrant changing the occupational group. The concept of the Police Communications series does not meet the EPS occupational group’s definition.

Because the Enforcement and Protective Services occupational group is inappropriate, consideration was given to the Professional Services (PS) occupational group and whether or not

one of those series could substitute for the Police Communications series. The Technician class series was the only possibility, because the class description states that incumbents perform skilled work as a direct extension of a professional field. However, because of the connection with a professional field, the nature of the work of a Technician in PS requires that work revert to a professional if not performed by a Technician. The occupations in the Professional Services occupational group “perform professional work concerned with the creative and conceptual application of theories ... or perform technical, specialized work as a direct extension of the profession, and directly related to the end product.” In the case of communications work, the duties would not revert to professional level theoretical work; therefore, the Technician series is unsuitable.

Because there has been no change in the nature of work of the Police Communications positions, and it continues to be support to law enforcement, there is no justification for moving these positions out of the ASR occupational group.

Police Communications Intern

In keeping with the direction to broaden classes, and avoid duplication of classes, concepts and levels in the state system, the Police Communications Intern class was reviewed for possible overlap or duplication with other existing classes. As class consolidation and system studies have been conducted, intern levels attached to individual class series have been eliminated if the broader occupational group intern series will adequately substitute. The current Police Communications Intern class overlaps with the State Service Trainee class series, which describes work for employees preparing to enter a specific class series. Positions in the State Service Trainee series receive on-the-job training or formal courses, and then, after training is complete, are allocated into the class series for which the training was developed; in this case, Police Communications Technician. With the State Service Trainee class series, agencies can still recruit in the same manner and continue to hire employees using the same minimum qualifications and desired competencies. In addition, the State Service Trainee class series has five levels, which will enable agencies to hire within a broad range of pay; and will allow movement for employees during the training period.

As of March 18, 2002, there were 18 filled and four vacant Police Communications Intern positions in the state system. This data excludes Colorado State University and the University of Colorado, due the questionable accuracy of their data in EMPL. In accordance with the Director’s Administrative Procedures, system maintenance studies are implemented on a “dollar-for-dollar” basis where an employee’s current base salary remains unchanged when a class is moved to a new grade. Although the pay grade of State Service Trainee V is lower than Police Communications Intern (G32 instead of G34), none of the current employees in the intern class has a salary that would be above the maximum of State Services Trainee V. Current Police Communications Interns remain as interns only for the initial training period, which lasts no more than one year, so it is unlikely that any employees will realize an impact on their compensation due to this change to a lower grade. Once training is completed satisfactorily, employees are promoted to the Police Communications Technician class. With open pay ranges, new interns can be hired at any point in the State Service Trainee V pay range so there should

also be no effect on traditional starting salaries for new hires. Agencies and employees are encouraged to continue using working titles on announcements, business cards, etc.

The proposed effective date for the pay grade change and the revised class description is July 1, 2003. The Police Communications Intern class will be available until June 30, 2003; however, agencies are encouraged to begin hiring interns into the State Service Trainee class series during the fiscal year 2002-2003, to avoid the need to convert positions on July 1, 2003.

Work Leader functions

Several requests were received from employees in two agencies to add a work leader class to the series as a means to reduce the overtime and on-call hours of the supervisors, and to recognize and compensate technicians who temporarily assume some supervisory duties in the absence of a supervisor. Many employees stated that if a work leader class were added to the series, supervisors would not be contacted off duty as often as they currently are. Additionally, there is the belief that if a technician were promoted to a work leader position, the other staff would be respectful of the position's authority.

Currently, at seven agencies, a police officer is the acting supervisor when a supervisor is not available; however, police officers do not perform the dispatch and communication duties in the absence of communications personnel. Two agencies schedule a more experienced technician on shifts where there is no supervisor available; however, this technician is still required to page the supervisor if an employee does not come to work as scheduled and is not permitted to make any schedule changes without consulting the supervisor. The more experienced technician does not receive additional compensation.

In the job evaluation system, work leader duties include assigning tasks, monitoring progress and work flow, scheduling work, and providing input into supervisory decisions including signing leave requests and approving work hours for two or more FTE on a permanent and on-going basis. There is no indication from the information collected from agencies that work leader duties, such as authority for scheduling work, approving work hours, or signing leave requests, are assigned to any one technician position on a permanent, on-going basis; therefore, a work leader class will not be created in this series.

Technicians who temporarily assume duties "in absence of" a supervisor, for example monitoring new personnel or assisting with training, do not meet the definition of a work leader. It is expected of any fully trained and experienced employee to be a resource in training new employees, regardless of the occupation. The job evaluation system's definition of "individual contributor" includes training and explaining work processes. Classes are created to define distinct, permanent, on-going work assignments. Almost all positions in all levels and occupations fill in when a supervisor or co-worker is absent; thus, such activity becomes a universal characteristic that does not determine a class level. "In absence of" assignments are not a regular, significant portion of the assignment, nor are they the full set of higher-level duties of a work leader. The Department of Public Safety provided Position Description Questionnaires (PDQs) for their technician and supervisor positions. Neither of the PDQs provided indicates that job duties reflect functions of a work leader position. There is no documentation that work

leader duties exist in any position in any agencies. Specifically, there is no difference in the level of factors assigned to the technician positions that warrants a separate or distinct class.

The primary issue is that a supervisor is required to be on call at all times. As part of the job requirements, Police Communications Supervisors may be on call 24 hours a day, seven days a week. When critical incidents occur such as a shooting, a pursuit, or an incident affecting an entire college campus, at most agencies it is policy that the supervisor is considered an essential employee and is expected to report to work. There is no evidence that the addition of a separate work lead class is the appropriate means for relieving the supervisor of on-call duties. This is a matter of work environment and it is the appointing authority's decision to structure the work unit this way. This is not the basis for creating a class and increasing base pay. Other classes also have on-call and call-back demands. Compensation tools exist to deal with them.

There are two types of premium pay – on-call and call-back – to address situations where an employee is expected to be available after finishing a shift or when required to return to work. The compensation plan does not identify the Police Communications class series as one designated eligible for on-call or call-back pay. However, if an agency desires, a request can be made for approval to designate specific positions as eligible for one or both types of premium pay. It is inappropriate to create a class to address issues that premium pay practices are designed to address.

Recruiting and Retention Issues

Turnover was identified as an issue that needed to be addressed in this study. Comments received from two agencies indicate that turnover is a result of stress on the job, shift work, lack of understanding of the job responsibilities when hired, lack of appreciation by management, and pay. Stress on the job and shift work are inherent aspects of the job – people who choose police communications as a profession should be made aware of these aspects of the job before hire. Lack of understanding the job responsibilities is an issue that must be addressed by agency management. Perceived lack of appreciation for work performed by these positions is also a management issue that cannot be addressed through system maintenance studies. Although issues with the work environment cannot be addressed through a system maintenance study, management at the agencies with these issues are strongly encouraged to pursue other methods to address these matters.

Most of the comments indicated that raising the pay grade for Police Communications Technicians would make up for the stress of the job and lack of appreciation by management; however, salary ranges are established based on prevailing rates in the market. Pay is not a substitute for other important factors such as an unsatisfactory relationship with a supervisor or an undesirable work environment. The Police Communications Technician is a class that is matched in the labor market. Data has been collected for many years; the last six years of data indicate that the pay grade for the Police Communications Technician class is in line with the market.

The reasons employees leave positions are documented in EMPL. The turnover data in EMPL reflect when and why employees leave a given position. Documented reasons for leaving a job

include such things as personal reasons, relocation, retirement, and dissatisfaction with pay or working conditions.

Turnover data for all three classes in the Police Communications series for the calendar year 2001 was obtained from EMPL. The University of Colorado and Colorado State University were excluded due to the questionable accuracy of their data in EMPL. The turnover rate for the Police Communications Intern class was 27%. Out of 26 positions, there were seven separations: one person failed the training class and one received a disciplinary termination. The remainder reported personal reasons as the reason for leaving. Compensation was not a reason given by any employees in this class. It is expected that turnover in a trainee class would be high, because interns are expected to either move up to a higher class or “move out.” The turnover rate for the technician class was 16%. Out of 106 positions, there were 17 separations: two retired, one failed the training class, one accepted a new job outside of the state system, one relocated, one received a disciplinary termination, and 11 left for personal reasons. Again, compensation was not a reason given. The data shows that no supervisors left the state system during 2001. For comparison purposes, the turnover rate for the Administrative Assistant class series, the largest in the ASR occupational group, has fluctuated between 15% and 16% over the past three years. After reviewing and evaluating this data, turnover is not higher than expected; in fact, turnover is non-existent in the class that is off-market. Pay was not a reported reason for employees leaving this class series.

Pay Grades

One agency suggested that pay grades for the Police Communications series should be set the same way the pay of Troopers is set. Troopers obtained legislation that changes the definition of the prevailing market and resulting survey procedures for the Trooper class series only. For purposes of determining and maintaining compensation for state troopers employed by the Colorado State Patrol, prevailing total compensation data is defined as at least 99% of the average total compensation provided to the top three law enforcement agencies within the state that have more than 100 commissioned officers and the highest actual average total compensation. This is not the procedure established or authorized to set salaries for any other class in the state personnel system. Statute dictates that the department utilize the results of third-party surveys to determine the prevailing wage in the market, and maintain comparable pay for the state’s work force. For the Police Communications Technician and Supervisor classes, reliable market survey data is readily available and compensation is set at a prevailing rate.

When examining market data, the significance of the difference between the market and state jobs, and the trend or stability of the difference over time (typically at least three years) are considered. To account for variances in the market, a tolerance range of 7.5% above or below the market is applied before consideration is given to adjusting a grade. In those cases where survey data indicates that pay is at the market level mid-point, the grade for the class remains unchanged.

This study evaluated the most recent six years of salary data for the technician class. There are 39 front-range jurisdictions that report salaries for Police Communications Technicians in the Colorado Municipal League (CML) survey. The survey match was verified by comparing the CML capsule description with the state’s class description and also with job descriptions obtained from jurisdictions in the market. Based on the data reported in CML, the mid-point for

the Police Communications Technician class has been at a level comparable to the market. Because the Police Communications Technician class has been a solid survey match and the mid-point has been consistent with the market mid-point for the last six years, no adjustment is recommended for this class.

Based on survey data, it is recommended that the pay grade for the Police Communications Supervisor be increased by five grades (12.5%), from G44 to G49. There are 34 front-range jurisdictions that have reported salaries for the last three years for Police Communications Supervisors in the Colorado Municipal League (CML) survey. The mid-point for the Police Communications Supervisor class has been continuously below the market mid-point, by an average of 14.5%, with the difference increasing over survey cycles (from 11.5% in 1999, to 15.5% in 2000, to 16.5% in 2001). This is outside the state's tolerance range. Given the 0% turnover rate in the supervisor class last year and the fact that market data fluctuates, it is appropriate to take a moderate, fiscally conservative approach to increasing the pay grade for the Police Communications Supervisor. An increase of five grades will bring the supervisor class mid-point in line with the market, and the relationship in pay grades between fully-operational positions and first-line supervisors in the ASR occupational group will be comparable.

Increasing the pay grade for the Police Communications Supervisor class results in a difference of 11 pay grades (27.5%) between the fully-operational Police Communications Technician class and the supervisor class. This is similar to the relationship between a fully-operational class and the first-level supervisor for other classes in the ASR occupational group. In the ASR occupational group, the relationship between fully-operational and supervisor classes ranges from six to 20 grades (15% to 50%). Based on this information, and the fact that market data is available for both the Police Communications Technician and Supervisor classes, this new internal relationship is reasonable.

In addition to reviewing the pay grade mid-points reported in CML, actual salaries for supervisors were evaluated. The data in the CML survey was collected in January 2001 and is the most current data available. In order to make a valid comparison between market data and state salary data, the department uses the most recent annual Employment Cost Index (ECI), which is statistical data released by the federal Department of Labor, Bureau of Labor Statistics. The ECI is an indication of employment cost changes over a period of time. Using ECI ensures that all data are projected to a common date, in this case, July 1, 2002. It allows the state to avoid using "old" data to do market comparisons. The projected actual average salaries for state Police Communications Supervisors (including anniversary increases) shows the average actual pay for state employees is \$3624.88. The projected CML reported salaries shows the average actual pay for supervisors in the market is \$3884.75. This represents a 6.57% difference in actual pay between supervisors in the market and the state. The department does not use actual salaries to set pay grades; however, this data was used for information purposes. It indicates that the Police Communications Supervisor salaries are not as far off as the market mid-point might indicate, and because turnover last year was zero, it justifies not raising the pay grade by more than five grades in order to match the market.

The chart below shows the proposed changes for the class series. The pay grade changes will be effective on July 1, 2003, pending funding.

CURRENT CLASS	CURRENT GRADE	PROPOSED CLASS	PROPOSED GRADE
Police Comm. Intern	G34	State Service Trainee V	G32
Police Comm. Tech.	G38	Police Comm. Tech.	G38
Police Comm. Supervisor	G44	Police Comm. Supervisor	G49

Minimum Qualifications

Several comments were received regarding minimum qualifications for this class series. Comments included the following:

- Applicants should be able to type from conversation, not just from a script.
- Applicants must be available to work shifts.
- The ability to deal calmly with the public is crucial.
- Basic computer experience using Windows would be helpful.

Minimum qualifications are an issue in the selection process that is separate from system maintenance studies. The above comments were forwarded to, and will be addressed by, the work unit that is responsible for establishing minimum qualifications and competencies for state classes.

MEET AND CONFER RESULTS

CRS 24-50-104(1)(b) requires the department to meet and confer with affected employees and employee organizations, if requested, regarding the proposed changes before they are implemented as final. Notice of the meet and confer meetings was in the official publication of the proposed changes (JEL 02-5) dated April 2, 2002, that was sent to agency human resource administrators and the four employee organizations via e-mail and fax. The information was also posted on the Internet. The official notice of proposed changes had a deadline of April 19, 2002, by which all "meet and confer" activity must have been concluded. Two public meetings were held:

April 8, 2002	State Patrol Training Academy, Golden	10:00 a.m.
April 11, 2002	Front Range Community College, Westminster	1:00 p.m.

There were 40 employees at the State Patrol Training Academy session and 12 at the Front Range Community College session. Additionally, the department received one phone call requesting clarification of the new pay grade for the supervisor class, and one email with comments. A letter was sent in response to the issues and concerns raised in the email.

The following summarizes the comments received at the meetings and in the e-mail.

Occupational Group

Several employees requested that the Police Communications class series be moved out of the Administrative Support and Related (ASR) occupational group, and into the Enforcement and Protective Services (EPS) occupational group, because Police Communications staff receives training in emergency medical procedures, and they deal with health and safety issues not typical

of other ASR classes. The job evaluation system has ten occupational groups that were implemented in 1987 in response to legislation that changed the methodology for the annual total compensation survey process. As discussed before, the placement of the Police Communications class series into the ASR occupational group was decided through appeals brought forth at that time.

Concurrent with this study, the EPS consolidation study is being conducted by a study team under the leadership of another occupational specialist. This issue was also raised in that study. That study team, after reviewing the EPS occupational group definition, agreed that if the definition were revised to include classes that are not delegated peace officer status, the ability to distinguish between classes or positions in or out of this occupational group would be lost. The EPS study team concurred that the occupational group definition should not be expanded to include classes or positions beyond the peace officer level I, Ia, or II.

There have been no substantial changes to the nature of work in the Police Communications class series and the positions have not been designated peace officer status. The concept of the Police Communications series does not meet the EPS occupational group's definition; therefore, no change of occupational group is recommended.

Police Communications Intern

One employee questioned how it would be possible to recruit new interns if the pay grade were lowered. Agencies are permitted to hire at any point within a salary range; so if an agency chooses to hire at the current starting salary, or at a different rate with the range, it has that discretion.

Two agency representatives have indicated that occupational group trainee classes, including State Service Trainee, have been used successfully in their agencies for recruiting employees to be trained for Police Communications Technician work; and it would be beneficial to have a trainee series in every occupational group.

The minimum qualifications for the State Service Trainee series require only a "combination of education and experience sufficient to ensure that, following satisfactory completion of the training period, employees will meet the requirements of the class to which the position will be assigned." The training program for State Service Trainee positions is to be specified by the agency at the time a position is allocated into the class series. There is no need to alter the qualifications or training programs currently being used, and two agencies have already shown that the State Service Trainee series can be utilized successfully.

Work Leader functions

Several employees discussed the need for a work leader in the series. The department acknowledges that there are Police Communications Technicians in the personnel system who are given temporary status as work leaders; however, there has been no evidence presented that the assigned functions are being performed on a permanent, on-going basis. In order for the department to consider creating a work leader class in this series, documentation on actual Position Description Questionnaires would have to be produced showing factors that are

different from those designated to an individual contributor. In the ASR occupational group, with only two exceptions, separate work leader classes do not exist because the job duties do not translate into different factors between the individual contributor and work leader, or between the supervisor and the work leader.

The department recommends that agencies that desire to compensate Police Communications Technicians for temporary work leader duties, consider applying discretionary pay differentials or pay premiums, in accordance with provisions or per rule.

Recruiting and Retention issues

There were several comments that turnover is high in the intern class because the pay is too low. One agency representative provided additional turnover data for her agency. Turnover data from the University of Colorado and Colorado State University was also reviewed. As stated earlier, with only one exception, pay is not reported as a reason for leaving. Other factors, such as failing the training class, termination by the agency and personal reasons were listed as causes.

An issue was raised that turnover data for Colorado State University and the University of Colorado had been provided to the department, but had not been mentioned in the proposal. Upon further exploration, this data was found to have been submitted to the occupational specialist for the EPS occupational group in April 2001 to provide recruiting and retention information for both police officers and police communication staff, primarily in response to the perceived inequity of police officer salaries in relation to the increase in troopers pay as a result of legislation. The data from Colorado State University, the University of Colorado at Boulder and Colorado Springs, Auraria Higher Education Center, and the University of Northern Colorado, has been obtained and reviewed. It shows a trend consistent with the data provided through EMPL for other agencies. Turnover is simply an indicator - pay ranges are set based on market data, not turnover. The turnover data received does not change the recommendation to sustain the pay grade for the technician class and increase the pay grade for the supervisor class.

Pay Grades

One attendee indicated that the Police Communications staff at the University of Northern Colorado have not had issues with pay.

Comments suggested that other states' and national data should be considered when determining pay grades. Statute and department survey procedures dictate that the department utilize the results of third-party surveys from the 20 county front range area to determine the prevailing wage. When front range data cannot be obtained, the department will consider multi-state regional or national data as reference only. For the Police Communications Technician and Supervisor classes, reliable market survey data is available through CML.

There were several comments indicating that the geographic location of the work assignment should be considered when determining pay grades. The department has received guidance from the Attorney General, as recently as 1996, that "the Colorado Constitution prohibits consideration of geographical location in setting base pay ranges" because it mandates "equal

pay for equal work ... based upon the nature, rather than location, of the work.” As a result of this advice, the department is not permitted to adjust pay grades based on the geographic location of the work.

Some employees indicated that the complexity of the job, the volume of work and the perceived high rate of turnover should be sufficient reasons to increase the pay grade for the technician class. Pay grades are based on market data. The complexity of a job is a job evaluation system factor considered when determining classes. Volume of work is not considered to be an indicator that pay grades should be modified. A larger amount of work does not equate to a higher pay grade. According to statute, pay is established by the department using published, third-party market data. Data showing high turnover can be an indicator that pay grades are out of line with the market; however, the market salary data remains the determining factor. In the case of the Police Communications Technician class, the market data has, for the past six years, shown that the pay grade is within the department’s acceptable parameters, and no change in pay grade is recommended.

Another comment questioned why the supervisors’ pay grade was not adjusted prior to this year, given that the department knew the pay grade for that class has been off-market for the past three years. The system maintenance study process includes establishing a market trend before classes are studied and it generally takes three or more years for a trend to be established. By waiting for market trends to be established, the department assures that the system does not overreact, in either direction, to normal market fluctuations for an individual occupation. In addition, timing is controlled by statute. In order for a study to be implemented on July 1 it must be published in the Annual Total Compensation Report by the statutory deadline in the previous fiscal year. This means that research, publication of the proposed and final narratives, and meet and confer sessions must be completed in time to include the final recommendations in the Annual Total Compensation Report.

The concept of “dollar-for-dollar” was explained at the request of an employee. System maintenance studies are implemented on a "dollar-for-dollar" basis where an employee's current salary remains the same when a class is moved to the new grade. An exception is when a class moves upward and the employee's current salary falls below the minimum of the new pay grade. In this case, the individual’s salary is raised to the minimum of the new grade. This process is in accordance with the Director’s Administrative Procedures. There is currently no position in the Police Communications Supervisor class with a salary that will be below the new minimum. While the higher pay grade will not result in an immediate pay increase for supervisors, it will allow future potential increases as a result of Performance Pay System awards and annual salary survey adjustments.

Minimum Qualifications

Minimum qualification concerns are beyond the scope of a system maintenance study; however, issues often come up during studies, so they are referred to the responsible work unit. Currently, the Police Communications Technician level requires “one year of experience in police radio/telephone communications equipment operations.” An observation was made that some interns complete the required training and are ready to be allocated to the technician level in less

than one year. An agency representative questioned if it would be permissible to move incumbents to the technician class before they have the one year of work experience. The Workforce and Staffing Consultants (WSC) work unit is devising a process to substitute equivalent competencies for minimum qualifications. Agencies are encouraged to work with the WSC unit on the use of competencies.

FISCAL IMPACT FOR IMPLEMENTATION YEAR

CRS 24-50-104(4)(c) and (6)(a) require that any study involving pay grade changes with potential costs must be included in the Annual Total Compensation Report for an effective date on the ensuing July 1. This study proposes to adjust the pay grades for two classes, one downward and one upward.

Data was collected from EMPL on March 18, 2002, and is assumed to be accurate as of that date. It excludes the University of Colorado and Colorado State University due to the different budgeting process used for funding at these two institutions and the questionable accuracy of their data in EMPL.

Only permanent positions are reported. Information on funded vacancies is included and is assumed to be accurate. It is also assumed that the vacancies will be filled for the entire year of implementation. Temporary and substitute positions are excluded.

The implementation date of July 1, 2003 coincides with the presumed implementation of the annual salary survey adjustments. In accordance with the Director's Administrative Procedures regarding the order of multiple actions on the same effective date, system maintenance studies are implemented first. For this reason and to meet the reporting deadline, these calculations do not include any potential annual salary survey adjustments.

In accordance with the Director's Administrative Procedures, system maintenance studies are implemented on a "dollar-for-dollar" basis where an employee's current salary remains unchanged when a class is moved to the new grade. An exception is when a class moves upward and the employee's current salary falls below the minimum of the new grade. Such adjustments to base salary represent increased cost.

Any change in PERA costs needs to be included in the calculations performed by affected agencies.

The proposed pay grade changes in this series represent no increased cost to agencies. Adjusting the pay grade for the supervisors will not increase cost because all positions are currently at salaries above the minimum of the new pay grade (G49). Converting the interns to the State Service Trainee V class results in a pay grade change; however, salaries of the current interns are within the new grade (G32).

RECOMMENDATIONS

I. Occupational Group

No change is recommended. These classes remain in the Administrative Support and Related (ASR) Occupational Group.

II. Class Description

Will be published July 1, 2003.

III. Class Conversion

The conversion of a class is the movement from the former class title and grade to a new class title and grade for purposes of future reinstatement and retention. It is used for those studies that do not involve class placement. The following changes will be implemented on July 1, 2003.

CURRENT			JULY 1, 2003		
Code	Title	Pay Grade	Code	Title	Pay Grade
G1A1IX	Police Comm. Intern	G34	G3J5IX	State Svs. Trainee V	G32
G1A2TX	Police Comm. Tech.	G38	G1A2TX	Police Comm. Tech.	G38
G1A3XX	Police Comm. Supv.	G44	G1A3XX	Police Comm. Supv.	G49



SYSTEM MAINTENANCE STUDY

NARRATIVE REPORT -- FINAL CHANGES

PHYSICAL SCIENCES & ENGINEERING (PSE) CONSOLIDATION STUDY

Class Code I1A1TX through I9B4XX

Conducted Fiscal Year 2002-2003

BACKGROUND AND PURPOSE OF STUDY

This system-wide study is part of the Department of Personnel and Administration (hereafter "the department") statutory responsibility, CRS 24-50-104(1)(b), for maintaining and revising the system of classes covering all positions in the state personnel system. Such maintenance may include the assignment of appropriate pay grades that reflect prevailing wage as mandated by CRS 24-50-104(1)(a). The state personnel director has delegated authority for system studies to the Division of Human Resources (hereafter "the division"). This study concerned the classes in the Physical Sciences and Engineering (PSE) Occupational Group.

This study was initiated for several reasons: one, this occupational group had not been studied for further consolidation following the 1993-95 Job Evaluation System Redesign Project; two, some classes' pay grades indicated the need for further review; and, three, several agencies reported ongoing difficulties applying the Telecommunications/Electronics Specialist classes as the concepts were oriented towards telephone work that failed to adequately address other electronic specialties.

METHODOLOGY

Based on the above needs for the study, the responsible occupational specialist proposed that it be included in the work plan for the 02/03 fiscal year. Following management approval of the work plan, this study was included in the list of studies to be completed this fiscal year. The conduct of the study followed the Guide to the System Maintenance Study Process established by the division and published on their web site. Individual placement of positions was not a

purpose of the study, hence Position Description Questionnaires (PDQs) were not collected and evaluated.

The list of all system maintenance studies was formally announced via email to all agency human resource (HR) administrators and placed on the department's web site during August 2001. Study team members were recruited at the same time. Criteria for selecting a study team member included being well versed in the system's principles, structure, and factors; having the ability to think conceptually and creatively; possessing the ability to devote the necessary time and energy required; and being able to take an active role in explaining and defending the study and its outcomes.

From the volunteers for the study, the study team leader selected representatives from the departments of Public Health & Environment, Natural Resources, Transportation, Personnel & Administration, and representatives from the higher education agencies of the Colorado School of Mines and the University of Colorado - Boulder. These study team members represented the major groups of positions in this occupational group. Additionally, a study co-leader and representatives from the Total Compensation Unit and the Workforce Staffing Unit from the Division of Human Resources joined the study group.

The study team was first assembled December 19, 2001, when the objectives and process for the study were reviewed with study team members. The primary study objectives were:

- Consolidate classes where appropriate.
- Validate use and need for classes and concepts.
- Validate minimum qualifications and competencies.
- Review the pay structure, prevailing market, and practices.
- Make appropriate changes to classes.

The study team first reviewed the classes in this occupational group and discussed potential issues and solutions. This group consisted of 61 classes grouped into 15 series. These series were grouped into five larger sub-groups for ease of compensation management and pay relationships. The largest classes are the engineering series with 538 positions spread among eight separate departments. The smallest series, Biomedical Equipment Technician, consists of only two positions in one agency.

The study team developed a study plan and a communications plan to guide its work. The goal was to have the class description changes ready for implementation on July 1, 2002, with any pay grade changes with fiscal impact implemented the subsequent July 1, 2003. The study plan included phases for data gathering, open forums to gather inputs and explain the study, discussions with subject matter experts, team analysis of the issues and solutions, decision making, and the review and finalization of the compensation levels. These would be proposed in the form of study recommendations, convening meet and confers, followed by final publication and implementation of the study. The following paragraphs outline the issues and recommendations of the study team and the division.

ISSUES AND FINDINGS

Definition of the occupational group

The study team reviewed the definition of the PSE Occupational Group. The existing definition is:

DEFINITION: These occupations perform professional work concerned with the creative and conceptual application of theoretical and practical aspects of physical, engineering, or architectural sciences with decision making related to subject matter, duties, and consequence of action. Included are supervisors and operating managers.

OR

These occupations perform technical, specialized work as a direct extension of the profession and directly related to the end product by applying basic technical scientific theories and principles of the professional area in performing a limited scope or portion of the professional assignments.

The study team found no inadequacies in the definition and recommends no changes.

Minimum qualifications

The study team reviewed all of the classes' minimum qualifications with a member of the Workforce Staffing Unit from the division. Several recommendations were made and those changes will be published separately from this publication. Once finalized, those minimum qualifications will be found on the division's web site, linked to the final class descriptions.

Specialty Areas

One of the initiatives of this study was to eliminate the use of specialty areas in the class descriptions. This feature uses the last digit of the class codes to identify types of sub-occupations or work areas within the broad classes. Some of the specialty areas represented previous classes in the pre-1993 job evaluation system and some represented classes of work where individual salary data was available and used to establish the pay levels for the broad classes. Some specialty areas represented distinct occupations within more general occupations such as civil engineers, mechanical engineers, electrical engineers, petroleum engineers, etc. The division questioned the need for the specialty areas.

The study team reviewed the uses of these specialty areas. They found that they were used much more in this occupational group than all the others combined. After initial review, study team members from most of the departments represented became strongly opposed to whole scale elimination of these specialty areas. They accepted that while a few of the classes' specialty areas were not being used, the broader classes needed to retain this capability. Specifically, the Colorado School of Mines, the University of Colorado - Boulder, and the Department of Natural Resources (DNR), the Colorado Department of Transportation (CDOT), and the Colorado

Department of Public Health & Environment (CDPH&E) expressed specific needs to retain the specialty areas, many of them in writing. They justified their needs to retain them as follows:

- All of the above agencies use the specialty areas to track employees and/or positions internally in their agency management information systems (databases) for such things as who are the authorities in certain occupations, canvassing their workforce for specific backgrounds when job openings occur, and assist with determining which occupational discipline falls within which job class.
- Some of the above agencies use the specialty areas to advise managers on hiring decisions related to pay according to specialty area, e.g., a manager hiring a geologist wants to know the average hiring pay of other geologists in the same department or other departments to guide his decision. Several division managers in DNR wrote their HR Administrator to ask him to seek support to retain these specialty areas.
- One hiring authority in DNR noted he has used the specialty areas to search for applicants for certain specialties.
- CDOT even goes further in breaking down the specialty areas further into sub-areas for promotions lists in things like traffic, design, or construction. These are also helpful in knowing when to schedule announcements and exams when specialty referral lists are close to being exhausted.
- At least three of the above agencies have internal computer databases using the specialty area breakdowns for tracking and reporting specific types of positions. Elimination of the specialty areas would create an additional workload to change this data and keep it current.
- All of the above listed agencies see no benefit to be gained from eliminating the specialty areas, at least in the engineering and physical sciences classes. They are being actively used and continue to be needed for the foreseeable future.
- Many of the study team members felt that the presence of specialty areas were a valuable aid in helping managers and employees understand the type of occupations included in the broad classes. They voiced the concern that removing them would place an additional burden on them to explain these occupations to the users and which specific occupations were or were not included in a specific class of work.

Most of the employees and supervisors or managers in attendance at the open forums stated they were not in favor of eliminating the specialty areas, some because of the fear of losing the salary survey matching abilities that would jeopardize the reliability of the annual survey. The study team leader pointed out that this would not happen, as the division would continue to collect and match these types of jobs, with or without the specialty areas. The open forum attendees also pointed out the loss of "identity" if the specialty areas are removed. The use of working titles could retain this identity feature.

In summary, the majority of the study team did not support the removal of specialty areas, except for the Statistical Analyst series, where they found that no one apparently uses them or relies on them to any great extent. They felt the elimination of the others would be detrimental to the personnel system and complicate their job in the agencies.

The Total Compensation Unit does support the need to retain some of the specialty areas, at least for the short term. Due to the salary difficulties in some of the individual sub-occupations such as electrical and mechanical engineer, and the hydrology and geology areas of the physical sciences, the unit sees advantages to retaining the identity of these types of positions in case these sub-occupations need to be split out from the broad classes at the end of the Phase II salary watch, as will be explained later in this report. If the specialty areas were to be eliminated now, breaking out those positions into separate classes or pay grades at a later date might require the individual placement or allocation of a lot of PDQs.

In conclusion, this study recommends that the specialty areas be retained in all classes in this occupational group except for the Statistical Analyst series. This conclusion is based on the large majority of study team members' input and a significant amount of advice from managers and employees at the open forums. Pending the outcome of Phase II of this study on the residual salary issues and the probable implementation of a working titles capability in EMPL, this issue can be reviewed at some future date.

Actuary and Statistical Analyst series

Actuaries

The Actuary class series consists of four levels and has very limited use in the state personnel system. Consideration was given by the study team to consolidating this series, but its unique work and distinctive levels make it incompatible with other class series. While there are only four positions in the series, all in one agency, they use all four levels at one time or another and none of the levels could reasonably be abolished. Because there were no issues identified with the description of the factors, no changes were identified for this series.

Salary review

The Total Compensation Unit had no salary data available for comparisons. Since only national level data is typically found for this type of work and it was inefficient to purchase national surveys for this small need, the salary levels were not reviewed at this time. Additionally, there have been no reports of recruiting or retention difficulties; hence, the Total Compensation Unit decided to postpone a salary review until another system need arises which justifies the purchase of national salary surveys and the actuary salaries can be reviewed at that time.

Statistical Analysts

The Statistical Analyst class series consists of four classes used by 16 different departments and institutions. There were no issues or requested changes for this series. The only change recommended is elimination of the specialty areas established previously. The study team could

find no need to retain these as they are not being used to track different types of positions in the system.

Salary review

The Total Compensation Unit reviewed the salary levels for these classes. No local salary data was available for review. Some limited salary data is reported in the 2001 Central States Compensation Association annual survey, in which Colorado participates. The unit compared the salary relationship between our Statistical Analyst II class and our Professional Engineer (PE) I class which shows that the PE I class salary level is 17.5% higher than the Statistical Analyst II class. In the Central States' survey, the average PE I class is at a salary level 26.5% higher than the average Statistical Analyst II class. Because the PE class is on the market, this limited relational salary data may indicate that our Statistical Analyst salary level may be too high, compared to the PE I class. However, salary data from the prevailing market, 20-county Front Range area, are needed to verify this condition. The Total Compensation Unit will try to find local market data for this class before a future adjustment is recommended.

Engineering and Architectural Services

Architect classes

The Architect series consists of four classes, the developmental through the first supervisory class. The previous intern class was abolished in July 2000 due to the lack of a continuing need for that class. Presently, the series is used by nine agencies with 15 positions among them. There have been no reported difficulties with the classes, concepts, or factors since this series was last reviewed in 1993. The study team found no issues with any of the classes, and, therefore, recommends no changes be made.

Salary review

The Total Compensation Unit found no local salary data available for review from the sources normally used as part of the annual salary survey process. However, some limited data was available from the Central States' salary report. Similar to the salary relationship comparison explained previously for the Statistical Analyst class, the unit noted that Colorado's PE I class salary range is 7.5% higher than the Architect I class. The Central States' data shows that, on average, their member states comparable PE I class is 7.21% higher than their comparable architect class. This limited perspective shows that our salary relationship between the two classes appears valid; however, local market data is preferred for verifying this fact. No change in pay grade is made for the Architect series.

Electronic Engineer classes

The Electronic Engineer class series consists of four levels from the full operating level upwards. It is presently used by three departments, with the Department of Personnel & Administration (DPA) having 11 of the 14 total positions. DPA provides statewide telecommunications services to not only state agencies, but cities and counties as well. This class series is separate from the

other engineer classes as the electronics occupations have historically had higher pay levels than comparable levels in the other engineering specialties such as civil, electrical, mechanical, etc. When needed, another series, Telecommunications/Electronics Specialist, is used for the entry and developmental classes for this Electronic Engineer series. The study team found no issues or problems with the classes, concepts, or factors. The DPA study team representative confirmed this as they have most of the positions in the system. No changes are recommended for these classes.

Salary review

The Total Compensation Unit had no local or Central States' salary data to review for the electronic engineers. National salary data was used to establish the pay grades when last reviewed in 1993 as part of the Job Evaluation System Redesign Project. No national salary data was currently available for a review; however, the unit recommends that their salary levels be reviewed as part of the three year "salary watch" study being proposed separately in this report for the mechanical and electrical engineers. It is recommended that national salary data be purchased as part of that effort and the electronic engineer pay patterns can be reviewed then.

Engineers

Two issues were raised about these classes; one, the titling of the Engineer Intern class is sometimes misconstrued as equating to the state licensing use of the same term and they mean different things; and, two, a request for a work leader class was raised again during the open forums. This series consists of seven classes from the entry, intern level up through the third supervisory level. Presently, there are approximately 536 positions in nine different agencies. All engineer specialties were consolidated into this one series in 1991, except the electronic engineers due to their higher pay levels. Most of the positions are civil engineering types with the majority of the positions being used by the Department of Transportation and Department of Natural Resources. Most engineers are hired at the intern, entry level and progress up the levels following licensure and experience, as higher-level positions are available. Licensure as a professional engineer is required at the Professional Engineer (PE) I class and above. A few unlicensed employees may exist in some of the licensure-required classes due to previous "grand fathering" in 1991 and prior years. These unlicensed employees continue to be allowed in these classes as long as a licensed engineer reviews their engineering work. However, they cannot promote to higher classes or other positions without obtaining the PE license.

On the issue of class titling, this became a problem when the State Board of Professional Engineers and Professional Land Surveyors changed their terms used to designate those engineers who have passed their Fundamentals of Engineering exam and are enrolled in the internship program to get licensed. They used the term "engineer intern" which meant they have passed that initial exam. The state's class of Engineer Intern is used for entry engineers who have not passed that initial exam with the Board. Thus, some confusion arose over the contradictory terms. In order to correct this terminology, the study team recommended that the term "engineer-in-training" (EIT) be used for the first three levels of classes where the incumbents are still trying to obtain full licensure. This should correct any misunderstandings.

Therefore, the study recommends that the first three classes be re-titled as Engineer-in-Training I, II, and III respectively.

The request to create a leadwork class of professional engineers was raised. Many other class series in the state personnel system have this level between the full operating class and the first supervisor level. Prior to 1991, some of the smaller agencies had a leadwork engineer class such as that requested; however, those were abolished then due to the overlap between the fully operational, licensed engineer and that leadwork class. The difficulty in distinguishing these two classes lies in the definition of leadwork in the state personnel system and the authorities granted by the PE license. The standard system definition of leadwork is:

Work Leader -- partially accountable for the work product of others, including timeliness, correctness, and soundness.

- Typical elements of direct control over other positions include assigning tasks, monitoring progress and workflow, checking the product, scheduling work, and establishing work standards.
- Provide input into supervisory decisions made at the higher levels, including signing leave requests and approving work hours.

The authority vested in licensed professional engineers in C.R.S. 12-25-101 et.seq., grants much the same responsibilities: i.e., an engineer licensed and registered may function as "responsible charge" which means control and direction of engineering work within a professional engineer's scope of competence. The study team decided that this control and direction equates to the same meaning as the above definition of lead work. They further decided that job evaluators would be unable to distinguish between the two meanings. Since the Professional Engineer I class is the first licensed level in this series, a lead work class between it and the first level supervisor (PE II) would cause confusion. Therefore, they recommend that another class not be created as the existing PE I class already includes the equivalent concept of lead work. The study team found no other changes needed for this class series; therefore, none are recommended.

Salary review

The annual salary survey includes significant amounts of salary data for six of the seven levels in this series. The data has shown a pattern of consistency over the past few years and has been highly reliable. For all of the matched classes, this salary data shows that the state's annual salary survey adjustments have kept these classes very close to the prevailing market. Many of the classes' variances from the market are in the +/- one to three percent over the last few years. This indicates no individual class pay grade adjustments are necessary. The Total Compensation Unit analyzed the engineer salary data found in the Central States' survey report for the PE I and PE II classes as another indicator. They found little variation in salary relationships for the classes; however, they did notice one aspect not identified in the local salary data relating to the mechanical and electrical engineering specialties.

The 2001 Central States' salary data showed that on average, the mechanical and electrical engineers are paid more than civil types of engineers. The percentage was in the range of 12-15% higher on average. This pattern had not been observed in engineer salary data before. The local prevailing market data available for mechanical and electrical engineers is inadequate to support this "indicator" as being a definite trend; therefore, the study team recommends that the Total Compensation Unit continue to analyze this and try to find other local salary data either supporting or negating this. The unit should also consider purchasing national survey reports to determine if this is a definite trend over 3 years with documented retention and recruiting problems or a one-time perturbation in the Central States' market. If this trend for the mechanical and electrical engineers is confirmed as significantly different from other types of engineers in this broad class, then consideration should be given to splitting the mechanical and/or electrical engineers out into a separate class or pay grade. As mentioned above, the electronic engineers' salaries need review that can be done concurrently with this recommendation on the mechanical and electrical ones.

One other salary issue noted during the study was that all 68 incumbents except six in the PE III and PE IV classes are paid the same amounts because the maximum of their pay grades is identical. In effect, there is no pay difference between these two highest engineer classes. This is a compression issue that has also started to occur in other classes in the state personnel system. Due to the statutory lid's restrictive nature, more and more employees in the upper level management classes are faced with this problem. This issue is beyond the scope of this system maintenance study as it is statutorily based and must be solved by legislative action affecting the entire personnel system.

Landscape Architect

This class series consists of four levels, entry through work leader level. Due to lack of need, there has been no first supervisory levels as only 12 positions exist that are spread among five different agencies. The only issue that arose was a question as to why there is no first supervisor level. Since no one agency has enough landscape architects to have a need for the first supervisor class, none has ever been created. There still is no need for such a level, but if an agency identifies a need, one can be created. Presently, professional level supervisors in other class series, i.e., architect, engineer, general professional, or management, supervise all landscape architects.

Salary review

The Total Compensation Unit had only one year's local market data available for landscape architects. That 2002 data showed the state significantly above the market, but only one year's data is insufficient to make a recommendation for change. The unit also reviewed the pay relationship between landscape architects and other architects and found that the State pays them the same; whereas many of the Central States pay their landscape architects less than other architects. The study team recommends that the division continue to collect the local market data and track them for at least three years to establish a definite trend and then make the appropriate adjustment, if needed. At this time, there is no pay grade adjustment recommended.

ENVIRONMENTAL AND PHYSICAL SCIENCES

Environmental Protection Specialist

This class was a previous consolidation of several class series and consists of six levels ranging from the entry professional up through the second-level supervisory level. It has seven different specialty areas representing environmental work in air, consumer, land, health physics, waste management, water and a general "other" category of work. The series includes approximately 247 positions with the overwhelming majority being used by the departments of Natural Resources and Public Health & Environment. The study team initially looked at consolidating this series with the Physical Sciences Researcher/Scientist class series, which is parallel with the same levels, factors, and pay grades.

The division has been consolidating classes into broader ones in a system-wide effort since the 1980's. The PSE Occupational Group is the last group to be reviewed under this objective. Broader classes offer some advantages in reducing the number of position allocations needed as it adds flexibility to managers to modify job assignments without the necessity of having each change evaluated by human resource staff. Additionally, it offers employees the latitude to broaden their scope of assignment without necessarily requiring reallocation. This can enhance their career ladders. After a great deal of discussion and inputs received during the open forums in February 2002, the division decided to abandon its effort to consolidate these two series. This decision was based on the study team's inputs on the dissimilarity between the types of work the two series perform. The Physical Scientist classes are typically scientific or research in nature relating more to the pure science of their occupations, while the Environmental Protection Specialists' jobs are more oriented towards the regulatory or environmental protection or remediation of the earth's environment. While there are exceptions to this generalization, the study team decided that consolidation of the two series would end up too broad. Additionally, some individual salary issues between the two series indicated that the two series might not necessarily stay at the same parallel pay grades. These salary indications will be discussed in detail later in this report.

The study team did not identify any changes needed to the class description for the Environmental Protection Specialist series. While the open forums raised some questions about the salary matches used for the salary portion, no changes were agreed upon during this study. Therefore, the study team recommends no changes to the class description.

Salary review

Some limited prevailing market salary data was available to the Total Compensation Unit for review of pay grades for all six classes in this series. However, each class uses up to seven specialty areas for each level. The salary data available from the market surveys only has data available for one specialty area in each of the six levels and does not show a stable trend in one direction of the other. Additionally, the data available usually represented only a small number of firms and employees. The unit also reviewed the Central States' salary data to estimate some relationships between one of the classes in this series and another class in either the Engineer

series or the Physical Scientist series. The paragraphs below summarize what salary information was available:

- Environmental Protection Specialist (EnPS) I - the one benchmark matched in the Mountain States Employers Council (MSEC) survey shows this class to be slightly over 12% above the market. There were no Central States' comparable classes with which to measure any relationship against.
- EnPS II - one salary report from Colorado Municipal League (CML) shows the state's class to be approximately 7.5% above that market data. The Central State's relationships were inconclusive in either direction, above or below.
- EnPS III - one salary report from MSEC shows the state's class to be approximately 27% high, although that data represents only seven firms with 55 employees. The Central States' relationship data for 2001 shows this class high in one instance and low in another instance when compared with engineer classes. Again, the data is inconclusive to support any change at this time.
- EnPS IV - one salary report shows this class to be approximately 25% high while two of the three relationship measurements from Central States' show the pay grade to be close to an appropriate level.
- EnPS V - one salary report from 22 firms representing 42 employees showed this class to average 7-11% higher than the market over the last three years. There were no Central States' relationship data to measure for this class.

The Total Compensation Unit decided that the above data was too varied and inconclusive to make any pay grade adjustments at this time. The division has decided that a three-year, continuing effort is needed to search for additional market salary data to determine whether the above measurements are valid indicators of adjustments needed. The study team has recommended that the division institute Phase II (salary watch) part of this study that will perform a more detailed search and analysis of relevant salary data for most of the types of positions in this class series in order to substantiate any adjustments in pay grades. Some members of the present study team will continue to serve on this Phase II effort. That study effort will continue at least for another two years and its recommendations should be included in the 2005 Total Compensation Survey Report due to be released August 2004. Any changes from that phase will be published as proposed followed by a separate meet and confer stage.

Physical Sciences Researcher/Scientist (PS R/S)

This class series consists of six levels from the entry professional class up through the second-level supervisor. The work encompasses seven specialty occupations in the cartography, chemistry, geology, hydrology, industrial hygiene, meteorology, and a general purpose "other" category covering physical sciences work not described by any of the preceding specialties. There are approximately 178 positions across six different agencies with the majority of the positions being used by the departments of Public Health & Environment and Natural Resources.

The study team gave serious consideration to consolidating this class series with the above Environmental Protection Specialist class series, but abandoned that for the reasons stated in the preceding paragraphs.

Other than the consolidation question, the only other issue was the definition of the hydrology area. Some employee advisors to the study team suggested that the definition was rather limiting in scope as it only covered the "evaluation" of the economic, legal, political, and environmental aspects of water use. Most of the hydrology related jobs involve the planning, designing, implementing, and administering water policies and programs throughout the state. The study team agreed to expand this definition and include it in the proposed class description changes. This is the only change recommended for this class description.

Salary review

The Total Compensation Unit reviewed the salary survey data for these classes. Data exist for the lower three levels from the MSEC and CML survey reports. Most of the survey data available were for chemists alone. The salary data for the PS R/S I and II classes shows that the state chemist salaries vary in average for the last three years from zero to eight percent above the market. There were no Central States' salary relationship data for these first two levels. With only salary data for chemists, this was insufficient to draw any conclusions about other types of physical scientist's salary levels and the unit is unable to make any conclusive recommended changes. They do recommend that these classes be placed under the same three year salary watch (Phase II) as for the EnPS classes discussed above.

Available salary data for the full operating PS R/S II class showed that this class, mostly chemist positions with two small matches for geographic information system (GIS) type work in the cartography specialty, was also above the market by zero to ten percent over the last three years. Some Central State's salary data also varied by these same amounts, yet this measure was considered inconclusive. The Total Compensation Unit could not make a definitive decision on any pay adjustment to this class either. They recommend the same salary watch approach as discussed above.

Central States did include some pay relationship information for the PS R/S III leadwork class. That data also shows similar levels of variation of at-or-above the market for this class; again, inconclusive for any specific recommendations. No salary data, either locally or from the Central States' report had any information on the upper two levels in this class series. Phase II will also need to search for relevant salary data to support these classes.

Biomedical Equipment Technicians

This class series consists of three levels, from the full operating through the first level supervisor. The usage of this class has dropped significantly over the past five years and there are presently only two positions in the series, one at the I level and one at the II level. The study team representative from CDPH&E brought the PDQs for these two positions to the study team. Their review found that both positions were not really representative of maintaining and repairing biomedical equipment, but exclusively focused on alcohol breathalyzer equipment used by law

enforcement agencies in the state. These positions could be allocated to an electronics technician class just as easily. Because these were the only two positions in this series, and no other agency expressed a continuing need for this series, the study team recommends that these classes be converted to the newly proposed class series of Electronics Specialist. Comparable levels and pay grades currently exist, so conversion is straightforward. This conversion will occur so as to preserve the retention rights of all previous incumbents of these biomedical equipment classes. Therefore, the existing classes of Biomedical Equipment Technician I, II and III will be converted to the newly proposed Electronic Specialist II, III and IV classes respectively. The pay grades are comparable. CDPH&E has agreed to move their two positions individually so as to insure proper allocation; therefore, the classes will be vacant before the conversion and there will be no fiscal impact as a result of this change.

Salary review

Even though this series will be consolidated into the new Electronic Specialist series, the pay grades were reviewed to insure proper conversion to the new series. The local salary survey data shows the Biomedical Equipment Technician I class within two percent below to four percent above the market for the last four years; an average that shows them to be very close to the market. Therefore, they will be properly converted into the Electronic Specialist classes at very similar pay grades.

Air Environmental System Technicians (AEST)

This class series consists of two levels, the full operating and first supervisory classes. There are presently 22 positions in two agencies using this series. There were no identified changes needed to the class concepts, factors, or levels within the series. However, the study team seriously considered consolidating these two classes into either the Engineering/Physical Sciences (E/PS) Technician series or the Telecommunication/Electronics (T&E) Specialist series. The E/PS series classes were not compatible with the level definitions or factors. The pay grades did not reasonably approximate the existing pay grades for the AEST classes either. Because the pay relationships for the AEST classes were previously based on the T&E Specialist classes, that series was also explored as a potential for consolidation.

The study team compared the AEST I, fully operating level with the fully operating T&E Specialist II class. While the factors were compatible, the pay grades and minimum qualifications varied greatly. The AEST I pay grade is six grades (15%) higher than the T&E Specialist II class. The disparity in minimum qualifications was also significant and the types of work differed in many aspects. There were no salary data to support any reduction in the pay grade of the AEST I class or increase the pay grade for the T&E Specialist II class.

For the upper level AEST II first supervisor class, while the pay grades are compatible, the type of work remains different and the factor levels become confusing if consolidated. This was particularly true of the decision making factor. The decision making in the T&E Specialist IV class is at the Process level, whereas it is Operational in the AEST II class. The study team investigated the possibility of lowering the decision making in the T&E Specialist IV class to the lower level, but because it also includes a provision for staff authority, that would overlap the

T&E Specialist III class concept, which also includes the staff authority. Since the factor levels for the T&E Specialist series are all reportedly working well, there was no justification to changing those in a broadened Electronic Specialist series. There were also some differences in the minimum qualifications between the two classes, which would complicate the situation if the two were consolidated. In the end, after much debate, the study team recognized that the consolidation was just too difficult to justify and does not recommend consolidation.

Salary review

There were no local salary survey data available for the AEST classes, undoubtedly due to their unique state government nature of the work involved. Historically, their pay has been set based on the AEST II class being equivalent to the T&E Specialist IV class and the AEST I class being placed 15% below that. Since there is no change in pay grades being made for the T&E Specialist classes (see discussion below), there is no justification to change the pay grades for the AEST classes.

Civil Engineering Project Mangers (CEPM)

This series consists of two levels, both supervisory, involving construction project management. The Colorado Department of Transportation (CDOT) is the principal user with only one university using it sparingly. The only class description issue raised by both the CDOT representative to the study team and employees during the open forum, was that the supervisory requirements are too limiting in some of the smaller transportation regions in the state. As more and more of CDOT's design and construction project management are being contracted out, there are less and less FTE for these positions to supervise. The study team looked at all feasible alternatives to modify the supervisory criteria in the class descriptions, but found none that might work. One idea that CDOT may pursue on its own in defining the distinctions between the CEPM I and II classes based on project complexities. Some initial discussions with their resident engineers indicated this might be possible. However, this effort could not be completed before this study ended. With the authority given to departments to identify and use tradeoffs in the classes defined by the Department of Personnel & Administration, CDOT can pursue this issue on their own. Therefore, the study team agreed that no changes need to be made to the existing class description.

Salary review

The Total Compensation Unit found salary data was available for only one year (2002) from its local survey sources. This one year's comparison showed the state class to be significantly low (over 15%), compared to the market. The Central States' salary report was used to measure salary relationships between this class and the licensed engineer class. That analysis supported the one-year local data as it showed the salary level slightly (7.5%) low. While one year's data from both sources is inadequate to justify any pay grade adjustment, it does indicate the pay needs to be monitored closely for a future adjustment. The study team recommended that this class also be placed in the salary watch category over the next two years.

Engineering/Physical Sciences (E/PS) Technicians

This class series consists of three levels, from the full operating level Technician I through the first level supervisor, Technician III. These classes are widely used in a variety of engineering and physical science support roles in seven different agencies with approximately 368 positions. The bigger users are CDOT and the Department of Natural Resources. Many of the positions are promoted up from the Engineering/Physical Sciences Assistant class series, which is in the Labor, Trades, and Crafts Occupational Group. The series is sufficiently broad and there were no reported difficulties with the class concepts or factor levels. Hence, the study group recommended no changes to the class descriptions.

Salary review

The Total Compensation Unit reported ample salary survey data available for all levels in this series. The long-term salary data for the E/PS Technician I class shows a consistent pattern of slightly below to slightly above the prevailing market (variance was two percent low to five percent high). No Central States' relationship data was available for this class.

Similarly, there were long-term salary survey data available for the E/PS Technician II class. However, that data showed a consistent pattern of being above the market approximately seven to nine percent. This has held true for several years; however, no adjustment is recommended as lowering this class would place it too close to the E/PS Technician I class which is presently only three grades (7.5%) lower than the II class.

Additionally, there were ample salary survey data available for the E/PS Technician III class. The recent trend has been slightly low to as much as six percent high, but the latest trend is back closer to the prevailing market. Since the recent trend is closer to the market, no adjustment is recommended for this class. In conclusion, a similar pattern has been noted since the E/PS Technician classes were released from the redlining in 1998. For those intervening years, the I and III classes are being maintained near the market with the annual occupational group adjustment, but the II class has historically been above the market. For the reasons discussed above, no adjustments are recommended for these three classes.

Telecommunications/Electronics Specialist

This class series consists of five levels, from the entry through the first supervisory level. Historically, this class has focused primarily on telecommunications with the electronics aspect being secondary. With the burgeoning expansion of the electronics field in many other hardware and software occupations, the telecommunications part has been slowly receding. Over 17 agencies use this class series that consists of 139 positions. Only one agency, the Department of Personnel & Administration has a large number of these positions since it has statewide telecommunications and information technology (IT) system responsibilities. With the rapid expansion of computerization and networked electronic systems, the concepts of this class had become outdated. Several agencies had reported difficulties in using the existing class description. The study team spent a great deal of time in defining a new description of occupational work that better recognizes today's electronic communications work.

The study team members spent considerable amounts of time in meeting, both individually and as a group, with several subject matter experts, from the electronics side and the telecommunications side on the questions and issues. There were discussions and debates on the relationship between this type of work and the network technician work described in that series in the Professional Services (PS) Occupational Group. At the end of fact-finding and analysis of differing types of jobs related to electronics, the study group finally concluded that the work in this field is now better described by a broader electronics specialist series of classes. Telecommunications is still a big part of this field of work, but its focus is gradually shifting to computerization, networks, and electronics and away from the traditional telephone hardware. While a significant aspect of telecommunications will remain with the radio frequency (rf) management, that too is becoming electronic computerization in nature. Some expect the telecommunications work to slowly merge into computer electronics, but that is several years in the future. One exception noted was the telecommunications department at the University of Colorado - Boulder. Many of their jobs on the newer communications systems have moved into the information technology area and they are using those technical and professional levels in many cases. Although the IT Technician series does not possess a leadwork or supervisor level, the study representative from that university agreed they could switch their leadwork and supervisor positions back to the broader Electronic Specialist series to satisfy that need. The study team concurred as they could not create additional supervisory classes in another occupational group (PS) as it was beyond the scope of this study.

The study team finally decided to focus this class series on the broader electronics area at the technician level, which still equates to installation, repair, maintenance, calibration, and evaluation of electronic components and systems, be they communications, fire/security monitoring, building environmental (HVAC) controls, or other similar electronic systems. Thus, the study team recommends that the class description be written to reflect this broader electronics focus. The study team was confident that the existing levels and factors remain valid for this broader class concept, so those remain essentially unchanged. All of the existing telecommunication positions will be converted into the newer, broader electronics specialist classes. Individual departments will probably move additional positions into the new electronics classes also.

Salary review

The Total Compensation Unit reviewed the salary data available for this series. There were no data for the Intern level, either locally or from the Central States' report. Local salary survey data for the T&E Specialist I class has shown some fluctuation above and below the market for the last few years. Those fluctuations are within the tolerance criteria of the division, and since no clear trend one direction or another was shown, no adjustments are recommended. The local survey data for the T&E Specialist II, a benchmark level, shows that that class has been very close to the market, except the most recent year (2002), when it fell below the market by less than 5%. Since the tolerance is $\pm 7.5\%$ this is not a significant deviation and no adjustment is recommended. These will be monitored each year as part of the annual salary survey process.

Data for the TE Specialist III shows a less than one percent variation from the market. As no Central States' data was available, no change is indicated. There were no local survey data

available for the IV class and Central States' report contained no usable relationship data either. In conclusion, no changes in pay grades are indicated for any of the classes in this series. During the next few years, the Total Compensation Unit will search for broader electronics type salary data to augment the existing data that is primarily telecommunications in nature.

Laboratory Coordinator

This series consists of three levels and is used exclusively in higher education agencies with 65 positions coordinating the laboratory support for physical sciences and engineering academic programs. There were no reported issues with the present series and the study team identified no changes needed.

Salary review

Only a small amount of local salary data for a supervisor laboratory class was found. Since it was exclusively reported from health care settings, the data is only approximate. That data showed less than a one percent difference. Historically, the Laboratory Coordinator II class pay grade was set at nine grades higher than the Laboratory Technician II class in the Health Care Services (HCS) Occupational Group. Currently, that separation has expanded to twelve pay grades, primarily due to increases in the PSE Occupational Group have been higher than HCS Occupational Group. There were no Central States' salary relationship data available for comparison. The Total Compensation Unit decided that the existing differential is appropriate because the work directly relates to the physical sciences or engineering fields and not to health care services. No adjustments are recommended for any of these three classes.

Land Surveying

This series consists of four levels, from the intern surveyor up through the unit supervisor, professional land surveyor. Licensing is required in the upper two levels. There are currently 36 positions and these classes are used only by CDOT. This class series was restructured and the pay grades validated by a system maintenance study in 1998, so the class concepts, levels, and factors are current. The study team recommends no changes to the class description.

Salary review

The Total Compensation Unit found some salary data to compare to the state's classes for this series. Local salary data for the Intern I and Intern II indicated those classes are within approximately four percent of the prevailing market. One source of salary data for the Professional Land Surveyor I class shows our class to be above the market. Since that data were only available for one year, it is inconclusive to justify any change. There are no recommended adjustments to the pay grades for this class series.

MEET AND CONFER

CRS 24-50-104(1)(b) requires the department to meet and confer with affected employees and employee organizations, if requested, regarding the proposed changes before they are

implemented as final. The official notice of proposed changes (JEL 02-07) contained a deadline of May 28, 2002, by which all "meet and confer" activity must conclude in order to implement the recommendations on July 1, 2002. Three meet and confer sessions were held with approximately 29 employees and/or supervisors and an additional five study team members attending. In addition, two written comments were received from the University of Colorado - Boulder and the Colorado Water Conservation Board by the deadline. The following paragraphs outline the comments received and the division's responses.

One attendee questioned the salary relationship reported between the Statistical Analyst and Engineers when a closer relationship could be made with the Actuaries. The study team leader acknowledged that a closer relationship with actuaries exists as the type of work is similar; however, no salary data was available to make that relationship comparison. Because the local market salary data for engineers is highly accurate and consistent, that data were chosen for comparison purposes. As noted earlier on page six of this report, additional salary data for Statistical Analysts will be analyzed.

Representatives from the Colorado Water Conservation Board in the Department of Natural Resources and those from the Colorado Federation of Public Employees (CFPE) reported their appreciation to the study team for their cooperation on the study and compensation issues and expressed their support for the follow-on salary watch for the next two years in an expanded effort to answer the salary questions on the Physical Scientist and Environmental Protection Specialist classes. Specific questions arose on what the timeline was for this study and why the two years versus three years. Exact dates for specific steps for this salary watch (Phase II) have not been set, other than re-assembling the study team in late June 2002. The normal practice of defining a trend in compensation data analysis is typically three years total, this year plus two more years. One comment suggested that the division should already have five years of salary data on hydrologists since that was the last time the salaries were adjusted; however, the study team leader reported that some of the data was just received this past year.

A representative from the Department of Labor and Employment reported that their Labor Market Information Division has started a project to collect vacant position salary data from the Colorado labor market and furnished a project contact name to the study team. The Total Compensation Unit will follow-up to see if any of that information is viable as a source of salary data.

The attendees reported that the change in definition of the Hydrology specialty area is satisfactory, from their limited perspective. No other requests for changes were received by the study team as of the close of the comment period. Therefore, the definition will be finalized as proposed. Another comment questioned why geologists and hydrologists were not recognized as a possibility of being broken-out from the Physical Scientist classes if their salary levels are found to be consistently different from other physical scientists. It was noted that this would be considered if that salary trend is validated by the next two year's salary watch. This would treat them similarly to the electrical and/or mechanical engineers if their salary patterns are found to be significantly different from other types of engineers.

One employee questioned how often system maintenance studies are done and where does the salary data originate. The study team leader explained the schedule for system maintenance studies is generally based on need, either from the user agencies or the department's need to keep the system current. Because this occupational group consolidation study finishes the department's long-term effort for reviewing all occupational groups, no further consolidation studies are envisioned in the near future; however, broadbanding the compensation system may dictate the need for additional studies. Those studies have not been identified as of this date. Salary data is primarily obtained from third-party surveys purchased from local firms such as MSEC, CML, Colorado Hospital Association, Colorado Education Association, Hay Management Consultants, Mercer/Marsh, etc. National or regional data may be obtained from private compensation consultants and other states' salary information is available from the Central States Compensation Association or the Southeastern States Compensation Association. Direct market survey data can be obtained to supplement the above sources after seeking the appropriate advice of TCAC and meeting and conferring with employees and employee organizations.

The question of salary watch came up and what criteria are used to determine when salary levels indicate that further study or adjustment is needed. Similar to salary survey procedures, salaries consistently greater than 7.5% above or below the market for two to three years generally mean that further study and/or validation is necessary. Additionally, the nature of the labor market, recruiting and retention levels, and pay relationships with other similar occupations are considered when evaluating an off-the-market condition. Similar salary information in other regional or national markets may also be used to measure more appropriate salary levels.

The two Biomedical Equipment Technician positions in CDPH&E questioned when their movement to the Electronic Specialist classes might occur. Since the individual action is the responsibility of that agency's human resources unit, it is outside the purview of this study. That department had planned to move the positions prior to July 1, 2002.

One employee questioned the short time frame to respond to further comments on the proposed changes. Discussion led to the fact that the employee had not received timely notification of the proposed changes from her supervisor or manager. The department relies on human resources administrators and the supervisors and managers to disseminate the information to concerned employees because the department has no cost effective means of communicating such changes directly to employees. Because Personnel Procedures specifies that appointing authorities are responsible to notify their employees of such changes, difficulties with receiving notice of these changes should be brought to the attention of the employee's manager.

The University of Colorado - Boulder noted that the proposed narrative did not fully explain their position on the need for a leadwork and supervisory class in the IT Technician series. This was an oversight by the study leader. They felt it cumbersome to move leadwork or supervisor positions from the IT Technician series to the Electronics Specialist series when allocating such positions. The department recognizes their request for a follow-on study for the IT Technician series and will review that request. They had also requested that the Electronics Specialist series include tradeoffs for the Line/Staff Authority factors in the proposed class descriptions. The division decided not to allow such statements in the class description, as that would infer that

those exist in many situations; which is not a fact. Instead, all agencies are permitted to use tradeoffs when and where appropriate and justified. They are not routinely found, but are the exception found in only a few positions. As taught in the Job Evaluation and Compensation Certification Course, tradeoffs can be used by substituting a higher level factor for a lower level one in order to meet the factor levels for a particular class as stated in the class description. The use of this tradeoff provision is permitted in all classes, not merely the Electronics Specialist series, as long as the combination of factors is still unique.

SUMMARY

In summary, the meet and confers did not bring any new information to light that necessitates any changes to the proposed class descriptions. The results of the evaluation process are the proposed revisions to some of the class descriptions. With the changes recommended above, this occupational group will consist of 14 class series with a total of 58 classes. All of the changes will be implemented on July 1, 2002. Since there are no pay grade changes recommended for this phase of the study, there is no fiscal impact with this study assuming that the two Biomedical Equipment Technician positions are moved out of the classes prior to July 1, 2002 as planned.

RECOMMENDATIONS

I. Occupational Group

No change is recommended. These classes remain in the Physical Sciences and Engineering occupational group.

II. Class Descriptions

See attached. Only the Statistical Analyst, Engineer, Physical Science Researcher/Scientist, and Electronics Specialist classes have significant changes, but all class descriptions are re-published to reflect these latest study actions.

III. Class Conversion and/or Placement

The conversion of a class is the movement from the former class title and grade to a new class title and grade for purposes of future reinstatement and retention. It is used for those studies that do not involve class placement. The only classes being converted are the Biomedical Equipment Technician classes into the new Electronic Specialist classes. The table below shows pay grade changes for two of the classes. There is no fiscal impact as these classes are vacant upon conversion.

Current Code	Current Class	Current Grade	New Code	New Class	New Pay Grade
I5B2TX	Biomedical Equip. Tech. I	I22	I5E2XX	Electronics Specialist II	I22
I5B3XX	Biomedical Equip. Tech. II	I26	I5E3XX	Electronics Specialist III	I28
I5B4XX	Biomedical Equip. Tech. III	I32	I5E4XX	Electronics Specialist IV	I34



STATE OF COLORADO

CLASS SERIES DESCRIPTION

July 1, 2002

ACTUARY

I1A1TX TO I1A4XX

DESCRIPTION OF OCCUPATIONAL WORK

This class series uses four professional levels in the Physical Science and Engineering occupational group and describes actuarial work in the state's regulation of corporate insurance entities. Actuarial work is defined as the application of the principles of actuarial science, mathematics, statistics and related fields to determine rates for insurance and quasi-insurance products or plans, and to evaluate regulated firms' financial soundness as to life, health, social and casualty insurance, annuities, and pensions. The actuary examines insurance plans, premiums, reserves and liabilities in light of guaranteed benefits and changes in the legislative requirements and the claims environment. The work in these classes ranges from the fully-operational actuary (Actuary I) who performs actuarial reviews of firms' performance to the chief of actuary services (Actuary IV) who counsels department managers and legislators on regulatory insurance matters from the actuarial viewpoint and directs actuarial matters within an agency.

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ACTUARY I

I1A1TX

CONCEPT OF CLASS

This class describes the fully-operational actuary. Positions in this level perform many types of actuarial reviews in examining financial reports, verifying reserve valuations, determining the adequacy of reserves, and rendering actuarial opinions on filings, rate changes, etc. The work involves the review and analysis of insurance policies and rates, corporate management changes, licensure applications, financial reports, and other materials filed with the agency. Positions assist higher level actuaries with reinsurance or reserve valuation calculations and provide actuarial assistance and advice to agency insurance examiners.

CLASS SERIES DESCRIPTION (Cont'd.)

ACTUARY

July 1, 2002

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to carry out the process. An example of such decisions is determining whether a formal corporate actuarial opinion is acceptable and in compliance with state regulations. This includes determining how the review operation will be completed. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices. For example, positions at this level evaluate the benefits and guarantees offered in a standard life insurance contract and apply the correct valuation methodology and assumptions to determine the minimum statutory reserve.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study actuarial information to determine what it means and how it fits together in order to get practical solutions in the form of actuarial reviews. An example of such is where existing actuarial review guidelines are chosen to fit new types of insurance in order to determine if they comply with existing insurance regulations. Guidelines in the form of insurance regulations exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. An example is the collation and adaptation of casualty data from various sources to establish casualty insurance reserve factors.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of either of the following:

Securing compliance with regulatory insurance statutes, rules and regulations where the position has the authority to prescribe sanctions or penalties, or to revoke licenses. Regardless of the methods of persuasion or training used to attempt to obtain compliance or correct problems, the position can ultimately rely on legal authority to ensure action. An example of such is recommendations to bring non-complying insurance actions into compliance by persuading or convincing corporate insurance officers to change their actuarial processes to meet state requirements.

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories. This goes beyond what has been learned in training or repeating information that is available in another format. An example of such clarification is explaining and teaching other insurance auditors or examiners the rationale and intent of actuarial practices for consideration in their reviews.

CLASS SERIES DESCRIPTION (Cont'd.)

ACTUARY

July 1, 2002

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

ACTUARY II

I1A2XX

CONCEPT OF CLASS

In addition to work described by the Actuary I level, this class describes the second level of actuarial work. Positions in this class define the actuarial processes for reviews of regulated firms, assign work and standards to others, train others in the agency's work procedures and methods, and provide recommendations to supervisors and managers on others performance and training requirements. This class differs from the lower Actuary I level in the Decision Making and the Complexity factors.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level. Within limits set by the agency's available technology and resources, professional actuarial standards, and insurance program objectives and regulations established by a higher management level, choices involve determining the actuarial review process by selecting the set of operations that make up the process. The general review pattern, program, or system exists but must be individualized. When actuarial reviews are directed by higher level actuaries or managers, positions in this class choose the scope of the review to fit individual companies. This individualization requires analysis of actuarial data that is complicated and entails breaking the problem or case into parts, examining these parts in relation to actuarial principles, and reaching conclusions that result in actuarial processes. This examination requires the application of known and established actuarial theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. New actuarial processes or review objectives require approval of higher management or the agency with authority and accountability for the insurance program or regulation. For example, positions in this class decide the extent to which a given liability will be reviewed in a financial examination or whether a recommendation will be included in the formal report.

Complexity -- The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of actuarial theories, concepts, and principles in order to adapt them to specific circumstances and/or combine them into a different approach or tactical plan. An example of such is where existing actuarial review guidelines must be tailored to fit new types of insurance in order to determine if they comply with existing insurance regulations. While general actuarial policy, precedent, or non-specific review practices

CLASS SERIES DESCRIPTION (Cont'd.)

ACTUARY

July 1, 2002

exist, they are often inadequate or subject to continuous change so they are relevant only through approximation or analogy. An example is where a legal precedent exists in another state, but the actuarial treatment must be modified for this state's statutes and regulations. In conjunction with actuarial, statistical and insurance management theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing actuarial review guidelines so they can be applied to particular insurance circumstances and to deal with emergencies. An example is the evaluation of a new type of life insurance policy and the modification of evaluation methods to determine statutory reserves.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories. This goes beyond what has been learned in training or repeating information that is available in another format. An example of such clarification is explaining and teaching other insurance auditors or examiners the rationale and intent of actuarial practices for consideration in their reviews.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

ACTUARY III

IIA3XX

CONCEPT OF CLASS

In addition to work described by the Actuary I and II levels, this class describes positions that function as the state's authorities on actuarial matters. In addition to evaluating actuarial opinions and adequacy of loss reserves, positions in this level examine qualifications of actuaries, new types of insurance, and reinsurance plans. Positions also oversee the administration of actuarial examinations. Positions may supervise other actuaries and provide expert advice to peers, managers, and corporate officers on actuarial matters. This class differs from the Actuary II class in all four factors.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the interpretive level, as described here. Within limits of the strategic master plan and allocated human and fiscal resources, choices involve determining tactical plans to achieve the actuarial objectives established by the higher management (strategic) level. This involves establishing what processes will be done, developing the budget, and developing the staffing patterns and work units in order to deploy staff. This level includes developing and changing actuarial systems and guidelines that will be

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applied by others statewide. By nature, this is the initial level where positions are not necessarily bound by processes or operations in their own actuarial programs as a framework for decision making and there are novel or unique situations that cause uncertainties that must be addressed at this level. Through deliberate analysis and experience with these unique situations, the actuary determines the actuarial systems, guidelines, and programs for the future. An example of such is deciding the actuarial objectives used by other agency units conducting financial examinations of insurance companies after financial accounting standards change or when new forms of insurance enter the market.

Complexity -- The nature of, and need for, analysis and judgment is strategic, as described here. Positions develop actuarial guidelines to implement a program and maintain the ongoing regulatory mission of the agency. Guidelines do not exist for many situations. In directive situations, positions use judgment and resourcefulness to interpret circumstances in a variety of situations and establish actuarial guidelines that direct how an agency program will be implemented. An example is the direction to other agency units of actuarial objectives to use when conducting financial examination of insurance companies where new forms of insurance are entering the market.

OR

The nature of, and need for, analysis and judgment is unprecedented, as described here. Positions originate actuarial models, concepts, and theories that are new to the professional field AND where no prototype exists in state government. At the leading edge, actuarial guidelines do not exist so judgment and resourcefulness are needed to develop them. An example is the origination of a new actuarial model for determining loss reserves of a quasi-governmental agency with differing tax and legal status.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of negotiating as an official representative of the agency in order to obtain support or cooperation where there is no formal rule or law to fall back on in requiring such action or change from the other party. Such negotiation has fiscal or programmatic impact on an agency. In reaching settlements or compromises, the position does not have a rule or regulation to enforce but is accountable for the function. An example is the negotiation between the agency and an insurance company to settle disputes on the use of new actuarial practices which are not required by the state. This could have financial impact on the agency by reducing litigation costs and reduce programmatic efforts in lessening the time or frequency of actuarial reviews.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a work leader or staff authority. The work leader is partially accountable for the work product of two or more full-time equivalent positions, including timeliness, correctness, and soundness. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. Typical elements of direct control over other positions by a work leader include assigning tasks, monitoring progress and work flow, checking the product, scheduling work, and establishing work standards. The work leader provides input into

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supervisory decisions made at higher levels, including signing leave requests and approving work hours. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

OR

The staff authority is a pacesetter who has a unique level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. It is an essential component of the work assignment that has been delegated by management to the position. This authority directly influences management decisions within an agency. For example, management relies on such a position when making decisions regarding the direction that policy or a program should take in the staff authority's field of expertise. Managers and peers recognize and seek this level of technical guidance and direction regarding the application of a program or system within the agency or to its clients. An example of such authority is the agency authority on actuarial problems with marginal or problematic insurance companies.

ACTUARY IV

I1A4XX

CONCEPT OF CLASS

This class describes the highest level actuary. In addition to being the administrative head of an actuary unit, this position serves as the authority on actuarial matters for the state which involves counsel to department executives and legislators in refining insurance codes, regulations, and operations in the state. This position is also expected to serve as the state coordinator to national actuarial entities relating to insurance regulation at state levels. This class differs from the Actuary III class in the Line/Staff Authority factor due to its consultative nature to executive directors, legislators, and to chief actuaries in other states or on a national level. Positions in this class also typically supervise non-actuarial support staff in addition to agency actuaries. This class may also differ in the Complexity and Purpose of Contact factors.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the interpretive level, as described here. Within limits of the strategic master plan and allocated human and fiscal resources, choices involve determining tactical plans to achieve the actuarial objectives established by the higher management (strategic) level. This involves establishing what processes will be done, developing the budget, and developing the staffing patterns and work units in order to deploy staff. This level includes developing and changing actuarial systems and guidelines that will be applied by others statewide. By nature, this is the first level where positions are not bound by processes or operations in their own actuarial programs as a framework for decision making and there are novel or unique situations that cause uncertainties that must be addressed at this level. Through deliberate analysis and experience with these unique situations, the actuary determines the actuarial systems, guidelines, and programs for the future. An example of this is deciding the

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actuarial objectives used by other agency units conducting financial examinations of insurance companies after financial accounting standards change or when new forms of insurance enter the market.

Complexity -- The nature of, and need for, analysis and judgment is unprecedented, as described here. Positions originate actuarial models, concepts, and theories that are new to the professional field AND where no prototype exists in state government. At the leading edge, actuarial guidelines do not exist so judgment and resourcefulness are needed to develop them. An example of such might be the development of valuation models to support legislation on the introduction of new types of insurance and advising other states' insurance regulators on its design and applications.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of either of the following:

Negotiating as an official representative of one party in order to obtain support or cooperation where there is no formal rule or law to fall back on in requiring such action or change from the other party. Such negotiation has fiscal or programmatic impact on an agency. In reaching settlements or compromises, the position does not have a rule or regulation to enforce but is accountable for the function. An example is the negotiation with insurance representatives on language to be used in statutory changes and proposals.

Defending, arguing, or justifying an agency's position in formal hearings or court where the position is an official representative of one party. An example is the defense of the agency's actuarial position before legislative committees regarding pending legislation.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a unit supervisor or senior authority. The unit supervisor is accountable, including signature authority, for actions and decisions that directly impact the pay, status, and tenure of three or more full-time equivalent positions. At least one of the subordinate positions must be in this series or at a comparable conceptual level. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

OR

The senior authority is a pacesetter who has a unique level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. It is an essential component of the work assignment that has been delegated by management to the position. This authority directly influences management decisions beyond the agency. Managers and peers seek this level of technical guidance and direction as the designer of a statewide system or in a subject area for other areas of state government. Managers and peers, both internally and externally to the agency, rely on this pacesetter when making decisions regarding the direction

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that policy, programs, and systems should take in the pacesetter's field of expertise. An example of such authority is a state wide authority on annuity reserves from the actuarial perspective.

ENTRANCE REQUIREMENTS

Minimum entry requirements and general competencies for classes in this series are contained in the State of Colorado Department of Personnel & Administration web site.

For purposes of the Americans with Disabilities Act, the essential functions of specific positions are identified in the position description questionnaires and job analyses.

CLASS SERIES HISTORY

Effective 7/1/02 (DLF). PSE System Maintenance Study. No changes. Published as proposed 5/15/02.

Effective 9/1/93 (DLF). Job Evaluation System Revision project. Published as proposed 4/9/93.

Revised 7/1/87. Title change for class title (A1333).

Revised 7/1/85. Changed class codes, education and experience for all classes. (A1333 to A1337).

Revised 7/1/77. Changed nature of work, distinguishing factors, examples of work, and experience substitution for all classes. (A1333 to A1337).

Created 1/1/75.

SUMMARY OF FACTOR RATINGS

Class Level	Decision Making	Complexity	Purpose of Contact	Line/Staff Authority
Actuary I	Operational	Patterned	Secure or Clarify	Indiv. Contributor
Actuary II	Process	Formulative	Clarify	Indiv. Contributor
Actuary III	Interpretive	Strategic or Unprecedented	Negotiate	Work Leader or Staff Authority
Actuary IV	Interpretive	Unprecedented	Negotiate or Defend	Unit Supervisor or Senior Authority

ISSUING AUTHORITY: Colorado Department of Personnel & Administration



STATE OF COLORADO

CLASS SERIES DESCRIPTION

July 1, 2002

STATISTICAL ANALYST

I1B1TX TO I1B4XX

DESCRIPTION OF OCCUPATIONAL WORK

This class series uses four professional levels in the Physical Sciences and Engineering occupational group and describes work in providing statistical data analysis. The work supports management decisions on planning or evaluating the agency operations, demographics, or research areas. Work involves application of the principles and theories of mathematics and statistics by either manual or automated means. The primary focus of this class is work involving the use of inferential statistics, rather than work related to the use of descriptive statistics to report data. Typical work includes, but is not limited to, using sampling techniques, examining or constructing models, analyzing results, and reporting, estimating, or predicting statistical populations. Positions involved in statistical analysis of agency operations are typically concerned with providing statistical analyses and data to explain and predict changes in agencies' programmatic areas such as health care and vital statistics, inmates, college students, human services, revenues or expenditures, labor markets, education, and others. Positions using statistics in support of demographic programs provide services and data on population or economic factors, from and between census, to other public entities throughout the state. Positions using statistics in support of research apply published statistical theories and principles to analyze and make inferences on the research work.

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STATISTICAL ANALYST I

I1B1TX

CONCEPT OF CLASS

This class describes the entry level. The use of this level is intended to provide entry professionals with work experience in the application of statistical theories, principles, and

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STATISTICAL ANALYST

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methods previously acquired by education or experience in an actual work setting. The work is structured towards applying commonly used statistical methods, formulas, measures, techniques, and principles under the guidance of higher-level professional positions. Positions are expected to perform work under the guidelines for statistical reporting, analysis, and predictions governed by unit procedures, processes, and manuals. Deviations from these established guidelines require approval in advance of any action. Work involves some interpretation of data and/or defining the significance, bias, or extension and prediction of the data to customers or users. Analysis work at this level typically does not involve estimations or projections unless it is accomplished within agency established methods and procedures. Positions in this entry level typically do not supervise others but occasionally may supervise clerical, computer, or technical data collection or analysis positions.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The range of ongoing decisions regularly made is at the operational level. Within limits set by the specific statistical process, choices involve deciding the collection, analytic and reporting operation to carry out the process. Such decisions might include which statistical measures to use or how results are presented to the user. This involves independently deciding what steps will be used, and when and how they will be completed. By nature, the statistical data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action for completing a project within the established process. Such decisions may involve choosing between different sources of data, their compatibility, and whether the expected results will meet the requirements. While positions can deviate from the standard procedures of the unit, choices remain within a range of specified, acceptable standards, alternatives, and technical practices. An example of such a decision may involve choosing a lower or higher confidence level based on the reliability of the data analyzed.

Complexity -- The nature of, and need for, analysis and judgment is patterned as described here. positions study characteristics of the data and apply the appropriate statistical principles in order to get practical solutions in the form of standard statistical measures. Agency guidelines in the form of accepted statistical measures or computer software packages cover most situations. Judgment is needed in locating and selecting the most appropriate statistical guidelines which may change for varying circumstances as the task is repeated. An example could be the selection of appropriate integrity measures for statistical databases. This selection and interpretation of statistical guidelines involve choosing from alternatives where most are correct, but one is better than another depending on the given circumstances of the situation. As an example, the agency guideline may allow the use of either of two statistical estimating techniques, where the most appropriate one depends upon the population being analyzed or how the results are used.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of any of the following:

CLASS SERIES DESCRIPTION (Cont'd.)

STATISTICAL ANALYST

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Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time.

Advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions and behaviors. Positions may investigate the sources and accuracy of data to be analyzed, or advise requestors and users regarding misinterpretations of statistical data or to correct errors in sampling techniques.

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories or marketing a product or service. This goes beyond what has been learned in training or repeating information that is available in another format. Such interpretation may involve explanations of the intent of confidence levels or the meaning of regression analysis results. Interpreting such results requires the position to explain statistical theory along with the results.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team. This level may include work leader or supervisory accountability for less than two full-time equivalent positions.

STATISTICAL ANALYST II

I1B2XX

CONCEPT OF CLASS

This class describes the fully-operational level of statistical analysis. In addition to work described by the Statistical Analyst I class, work in this class involves the use of the principles and theories of the inferential statistics field. At this level, positions are expected to independently develop and complete a range of analyses and reports using inferential statistical measures commonly used in their field. Some applications may require modifications of those measures. Positions are expected to interpret results of these analyses and provide explanation for variances in measures used for program or research recommendations included in reports. Positions at this level are expected to make decisions and recommendations with only administrative review and act independently based on the full knowledge of the unit's activities and missions. Positions typically consult on statistical sampling techniques, database alternatives, and on organizing and conducting analyses of operations or research activities. Statistical projects include estimates or projections where reports are based on frequencies, distributions, correlations, regressions, and other measurements of collected data. Reports include summaries, conclusions, assumptions, and recommendations based on judgment and inferential techniques. Work typically includes deciding the modification of computerized statistical packages that compile or manipulate data, and the application of the packages to such data. This class differs from the Statistical Analyst I class on all four factors, although the Complexity and Line/Staff Authority factors may be at a similar level.

CLASS SERIES DESCRIPTION (Cont'd.)

STATISTICAL ANALYST

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FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The range of ongoing decisions regularly made is at the process level. Within limits set by the agency's available technology and resources, program objectives and regulations established by a higher management level and professional statistical standards, the choices involve determining the analytic process by selecting statistical procedures or principles to be applied in developing a model or the set of operations that make up the process. Such a choice might include the independent selection of inferential statistical measures used by an agency or research project in reporting data. The general pattern, program, or system exists but must be individualized to be applied. This individualization requires analysis that is complex. An example could be where multiple types of statistical analyses are conducted, then compared to produce the best, desired analytic information. New analytic models or objectives require approval of higher management or the agency with authority and accountability for the program or system. As an example, changing the analytic method of statistical data reported in unemployment program summaries to the federal government might require federal agency approval.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study characteristics of the data and apply the appropriate statistical principles in order to get practical solutions in the form of standard statistical measures. Agency guidelines in the form of accepted statistical measures or computer software packages cover most situations. Judgment is needed in locating and selecting the most appropriate statistical guidelines which may change for varying circumstances as the task is repeated. An example could be the selection of appropriate integrity measures for statistical databases. This selection and interpretation of statistical guidelines involve choosing from alternatives where most are correct, but one is better than another depending on the given circumstances of the situation. As an example, the agency guideline may allow the use of either of two statistical estimating techniques, where the most appropriate one depends upon the population being analyzed or how the results are used.

OR

The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and applicability or importance of statistical theories, concepts, and principles in order to adapt them to specific circumstances and/or combine them into a different approach or tactical plan. A tactical plan entails combining, modifying, or adapting statistical models, theories, etc., for a one-time project. (Note: Long-term or strategic guidelines are evidence of complexity in the next higher level in this series.) While general analytic policy, precedent, or non-specific practices exist, they are obsolete, inadequate, or subject to continuous change so they are relevant only through approximation or analogy. For example, the design of databases would include the analysis of data integrity using statistical principles to insure validity. In conjunction with statistical theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing analytical guidelines so they can be applied to particular agency programs. Examples of formulative types of statistics work might be where a

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STATISTICAL ANALYST

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special analysis of new types of tax revenue estimates are made to support legislation, or where a statistical prediction on a new research project is needed to support a particular grant. An example of formulative analysis and judgment might be where the statistical population has changed and the previous, commonly used estimating measures are no longer appropriate. As other measures are also incompatible, analysis is needed to combine several statistical measures to produce valid, meaningful results.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of either of the following:

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories. This is often evident in explaining and justifying the results of program evaluations or research data involving the understanding of statistical principles and theories. This goes beyond what has been learned in training or repeating information that is available in another format. An example of such might be interpreting statistical estimating measures to lay persons performing the research so that they understand the rationale and appropriateness of using particular statistical models with their projects.

Negotiating as an official representative of one party in order to obtain support or cooperation where there is no formal rule or law to fall back on in requiring such action or change from the other party. Such negotiation or persuasion has fiscal, programmatic, or operational impact on aspects of an agency's program. In reaching settlements or compromises, the position does not have a rule or regulation to enforce but is accountable for the function. An example of such a persuasive settlement could be when the statistician must convince data collectors in separate units to report system data in addition to their own needs to accomplish the mission of the statistician's unit.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor, a work leader, or a staff authority. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team. This level may include work leader or supervisory accountability for less than two full-time equivalent positions.

OR

The work leader is partially accountable for the work product of two or more full-time equivalent positions, including timeliness, correctness, and soundness. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. Typical elements of direct control over other positions by a work leader include assigning tasks, monitoring progress and work flow, checking the product, scheduling work, and establishing work standards. The work leader provides input into supervisory decisions made at higher levels, including signing leave requests and approving work hours. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

CLASS SERIES DESCRIPTION (Cont'd.)

STATISTICAL ANALYST

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OR

The staff authority is a pacesetter who has a unique level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. It is an essential component of the work assignment that has been delegated by management to the position. This authority directly influences management decisions within an agency. For example, management relies on such a position when making decisions regarding the direction that policy or a program should take in the staff authority's field of expertise. Managers and peers recognize and seek this level of technical guidance and direction regarding the application of a program or system within the agency or to its clients. One example of a staff authority might be the one position which is the agency authority on predictive or analytical measures of enrollment, inmate demographics, or labor market effects on unemployment.

STATISTICAL ANALYST III

I1B3XX

CONCEPT OF CLASS

This class describes the first supervisory level or senior authority level. In addition to statistical analysis work at the II level, positions in this class are unit supervisors or authorities over others involved in statistical analysis and inferential work. The work involves supervising statistical analysis work in support of organizational programs, be they public service or research. The work involves allocating resources and/or establishing guidelines for dealing with statistical analysis work. This level also includes those senior authorities performing statistical inferential analysis work. Such authorities are expected to design and apply new statistical inferential techniques and principles to agency **programs** or **systems** requiring statistical analyses and interpretation that apply a greater degree of complexity and require inferential, as well as descriptive, statistical measures. Such senior authorities are unique in an agency as the level of their expertise, the decisions impacted by their analyses, or their authority and responsibility over statistical processes are greater than the fully-operational analyst described by the statistician at level II. This class differs from the Statistical Analyst II class in Line/Staff Authority and may differ in Decision Making and/or Complexity.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The range of ongoing decisions regularly made is at the process level. Within limits set by the agency's available technology and resources, program objectives and regulations established by a higher management level and professional statistical standards, the choices involve determining the analytic process by selecting statistical procedures or principles to be applied in developing a model or the set of operations that make up the process. Such a choice might include the independent selection of inferential statistical measures used by an agency or research project in reporting data. The general pattern, program, or system exists but must be individualized in order to apply. This individualization requires analysis that is complex. An example could be where multiple types of statistical analyses are conducted, then

CLASS SERIES DESCRIPTION (Cont'd.)

STATISTICAL ANALYST

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compared to produce the best, desired analytic information. New analytic models or objectives require approval of higher management or the agency with authority and accountability for the program or system. As an example, changing the analytic method of statistical data reported in unemployment program summaries to the federal government might require federal agency approval.

OR

The decisions regularly made are at the interpretive level. Within limits of the strategic master plan and allocated human and fiscal resources for the unit, choices involve determining tactical plans to achieve the statistical analysis objectives established by the higher management (strategic) level. This involves independently establishing what statistical analytic processes and operations will be done, developing the budget to conduct these analytic operations, and developing the staffing patterns and work units. This level includes designing and changing statistical programs, models, systems, and guidelines that will be applied by others statewide, whereas the II level decisions have less impact on agency programs. An example of such could be changing the inferential technique used by colleges to predict the significance of enrolled students by average number of credit hours accomplished in previous reporting periods. Another example would be the decisions on implementing a statewide unemployment insurance analysis program to predict future strategic cost containment objectives. By nature, this is the first level where positions are not bound by processes or operations in their own statistical programs as a framework for decision making. There are novel or unique situations that cause uncertainties that must be addressed at this level. An example of uncertainty might involve how to handle program operations data that do not fit the criteria for inclusion or exclusion from the predicted statistical population. Through deliberate analysis and experience with these unique situations, the manager or expert determines the inferential guidelines and programs for the future.

Complexity -- The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and applicability or importance of statistical theories, concepts, and principles in order to adapt them to specific circumstances and/or combine them into a different approach or tactical plan. A tactical plan entails combining, modifying, or adapting statistical models, theories, etc., for a one-time project. (Note: Long-term or strategic guidelines are evidence of complexity in the next higher level in this series.) While general analytic policy, precedent, or non-specific practices exist, they are obsolete, inadequate, or subject to continuous change so they are relevant only through approximation or analogy. For example, the design of databases would include the analysis of data integrity using statistical principles to insure validity. In conjunction with statistical theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing analytical guidelines so they can be applied to particular agency programs. Examples of formulative types of statistics work might be where a special analysis of new types of tax revenue estimates are made to support legislation, or where a statistical prediction on a new research project is needed to support a particular grant. An example of formulative analysis and judgment might be where the statistical population has changed and the previous, commonly used estimating measures are no longer appropriate. As other measures are also incompatible, analysis is needed to combine several statistical measures to produce valid, meaningful results.

CLASS SERIES DESCRIPTION (Cont'd.)

STATISTICAL ANALYST

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OR

The nature of, and need for, analysis and judgment is strategic, as described here. Positions develop guidelines to implement a statistical analysis or information management program which contributes to the achievement of the agency's mission. Guidelines exist for only a few situations. In directive situations, positions use judgment and resourcefulness to interpret circumstances in a variety of situations and establish guidelines that direct how complex statistical models or an agency's statistical analysis program will be implemented. One example of providing strategic guidance could be the development of a plan for statewide statistical analysis of the impacts that various types of taxes have on consumption in a market segment. Another example could be the directions on statistical analyses on criminal recidivism across agency lines to include inmates, parolees, and those on probation.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of either of the following:

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories. This is often evident in explaining and justifying the results of program evaluations or research data involving the understanding of statistical principles and theories. This goes beyond what has been learned in training or terms, rules, processes, etc., that are available in another format. An example of such might be interpreting statistical estimating measures to lay persons performing the research so that they understand the rationale and appropriateness of using particular statistical models with their projects.

Negotiating as an official representative of one party in order to obtain support or cooperation where there is no formal rule or law to fall back on in requiring such action or change from the other party. Such negotiation or persuasion has fiscal, programmatic, or operational impact on aspects of an agency's program. In reaching settlements or compromises, the position does not have a rule or regulation to enforce but is accountable for the function. An example of such a persuasive settlement could be an instance where the statistician must convince data collectors in separate units to report system data in addition to their own needs to accomplish the mission of the statistician's unit.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a unit supervisor or senior authority. The unit supervisor is accountable, including signature authority, for actions and decisions that directly impact the pay, status, and tenure of three or more full-time equivalent positions. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

OR

CLASS SERIES DESCRIPTION (Cont'd.)

STATISTICAL ANALYST

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The senior authority is a pacesetter who has a unique level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. It is an essential component of the work assignment that has been delegated by management to the position. This authority directly influences management decisions beyond the agency. Managers and peers seek this level of technical guidance and direction as the designer of a statewide system or in a subject area for other areas of state government. Managers and peers, both internally and externally to the agency, rely on this pacesetter when making decisions regarding the direction that policy, programs, and systems should take in the pacesetter's field of expertise. One example might be the design of a statistical projection model to predict persons at-risk for a new disease that is adopted by other agencies.

STATISTICAL ANALYST IV

I1B4XX

CONCEPT OF CLASS

This is the highest level in this class series. As the highest level statistical analyst in an agency, positions direct the statistical program efforts through subordinate supervisors. Positions serve as advisors to other managers on statistical aspects of program and mission areas. Rare positions may be national experts on aspects of the field of applied inferential statistics. This class differs from the Statistical Analyst III class in its Complexity, Purpose of Contact, and/or Line/staff Authority.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the interpretive level. Within limits of the agency strategic master plan and allocated human and fiscal resources, choices involve determining tactical plans to achieve the statistical analysis objectives established by the higher management (strategic) level. This involves independently establishing what analytic processes and operations will be done in the agency, developing the budget, and determining the staffing patterns and work units in order to deploy statistical staff. This level includes inventing and changing statistical systems and guidelines that will be applied by others statewide. For example, a position at this level might direct the integration of the information management systems for an agency. This level is where positions are not bound by statistical prediction processes or operations in their own agency programs as a framework for decision making and there are novel or unique situations that cause uncertainties that must be addressed at this level. Through deliberate analysis and experience with these unique situations, the manager or expert determines the statistical systems, guidelines, and programs for the future of the agency. An example of such decisions would be those of the agency chief statistician whose analytic guidelines are used by other statisticians agency wide. Examples of demographic decisions could include choosing which long-range estimate or projection model is applied by other public entities; determining which demographic services will be available; or choosing population indicators to achieve more accurate estimates and projections.

CLASS SERIES DESCRIPTION (Cont'd.)

STATISTICAL ANALYST

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Complexity -- The nature of, and need for, analysis and judgment is strategic, as described here. Positions develop guidelines to implement a statistical analysis program to achieve the agency's mission. This level of complexity is the same as described in the lower III class. An example of demographic complexity could be the development of estimation and projection guidelines to be used by government offices that are based on changes in state government policies concerning the use of demographics for revenue projections or future water demands.

OR

The nature of, and need for, analysis and judgment is unprecedented, as described here. Positions originate statistical models, concepts, and theories that are new to the professional statistics field **AND** where no prototype exists in state government. At the leading edge, statistical analysis guidelines do not exist so judgment and resourcefulness are needed to develop them. One example of such would be the development of a statistical model to predict the tax revenue impacts due to the introduction of gambling in the state. An example in demography could be the development of a variant estimating model incorporating a local review process.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of either of the following:

Negotiating as an official representative of one party in order to obtain support or cooperation where there is no formal rule or law to fall back on in requiring such action or change from the other party. An example of such a persuasive settlement could be an instance where the statistician must convince data collectors in separate units to report system data in addition to their own needs to accomplish the mission. For the demography specialty, an example could be frequent negotiation with other state entities on the use and interpretations of population and economic estimates and projections.

Defending or justifying an agency's position in a formal setting or hearing where the position is an official representative of one party. An example of defending an agency's position might be when the department's chief statistician testifies before legislative budget committees to justify expenditures based on the statistics regarding criminal recidivism. Another example could be a position defending the agency's recommendation on rule or statute changes before a board or commission hearing based on previous or predicted statistical measures. Positions in the demographic specialty are expected to defend population data in formal hearings regarding the predicted population impacts on utility usages, revenue or expenditure projections, tax bases, enrollment forecasts, or municipal infrastructure planning.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a manager or leading authority. The manager must be accountable for multiple units through the direct supervision of at least two subordinate Unit Supervisors; and, have signature authority for actions and decisions that directly impact pay, status, and tenure. Elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, second-level signature on performance plans and appraisals,

CLASS SERIES DESCRIPTION (Cont'd.)

STATISTICAL ANALYST

July 1, 2002

and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

OR

The leading authority is a pacesetter who has a rare level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. It is an essential component of the work assignment that has been delegated by management to the position. This authority directly influences management decisions and peers in the profession outside of state government. Managers and peers beyond state government recognize and seek this level of technical guidance and direction because of the recognized expertise in a subject area. For example, program managers and colleagues in other states rely on this regional or national pacesetter when making decisions regarding the direction of their policy, programs, and systems in the pacesetter's field of expertise. This reliance on, and delegation of, primary responsibility for influencing management direction, including representing the state regionally or nationally, separates this level of staff authority from all others. One example could be a leading authority on the statistical analysis of tax revenues due to the start of legalized gambling whose expertise is sought by other states' taxing authorities. Another example could be a position serving as chairperson on a national working group to solve national demographic or census estimating problems.

DEFINITIONS

Statistics: As used in this document, the term statistics refers to that part of the science of mathematics related to the theories, proofs, and methodologies of probability and inference, and the systematic collection and evaluation of numerical data.

Descriptive statistics: The collection, organization, and tabulation of data and the calculation of various indices which represent the characteristics of the data. (NOTE: Many types of work include the application of descriptive statistics in support of their work.)

Inferential statistics: The systematic drawing of explanations, conclusions, or predictions from the data and its indices to a greater population.

ENTRANCE REQUIREMENTS

Minimum entry requirements and general competencies for classes in this series are contained in the State of Colorado Department of Personnel & Administration web site.

For purposes of the Americans with Disabilities Act, the essential functions of specific positions are identified in the position description questionnaires and job analyses.

CLASS SERIES DESCRIPTION (Cont'd.)**STATISTICAL ANALYST****July 1, 2002****CLASS SERIES HISTORY**

Effective 7/1/02 (DLF). PSE System Maintenance Study. Abolished specialty areas. Published as proposed 5/15/02.

Effective 9/1/93 (DLF). Job Evaluation System Revision project. Published as Proposed 3/22/93.

Created 8/1/78. Demographer, A0083/84.

Created 1/1/75. Statistical Analyst, A1540/2/4/6/7.

SUMMARY OF FACTOR RATINGS

Class Level	Decision Making	Complexity	Purpose of Contact	Line/Staff Authority
Statistical Analyst I	Operational	Patterned	Detect, Advise, or Clarify	Indiv. Contributor
Statistical Analyst II	Process	Patterned or Formulative	Clarify or Negotiate	Indiv. Contributor, Work Leader, or Staff Authority
Statistical Analyst III	Process or Interpretive	Formulative or Strategic	Clarify or Negotiate	Unit Supervisor or Senior Authority
Statistical Analyst IV	Interpretive	Strategic or Unprecedented	Negotiate or Defend	Manager or Leading Authority

ISSUING AUTHORITY: Colorado Department of Personnel & Administration



STATE OF COLORADO

CLASS SERIES DESCRIPTION

July 1, 2002

ARCHITECT

I2A2TX TO I2A5XX

DESCRIPTION OF OCCUPATIONAL WORK

This class series uses four levels in the Physical Science and Engineering occupational group and describes professional work in architecture. The work entails performing or overseeing the planning, design, and construction of facilities within the codes, standards, and specifications of the industry. The work includes working with agency customers and consultants/contractors to define and specify the requirements for new construction or major remodeling projects. It also may include preparation of cost estimates, functional capabilities and/or limits of the facility, and the impact on other facilities. Architects prepare initial design plans and specifications and participate in bid review and evaluation of designs for contract negotiations. Positions may monitor and observe constructions pursuant to contracts and administer the contract performance. Positions advise other agency managers and directors on architectural aspects of facilities, grounds, utilities, and long-range master plans. Some positions review and authorize architectural work as the designated representative of the state buildings division/unit. By statute CRS 12-4-102 et. seq., a license is required at the Architect I and above.

INDEX: Design/Planner begins on this page, Architect I begins on page 3, Architect II begins on page 4, and Architect III begins on page 6.

DESIGNER/PLANNER

I2A2TX

CONCEPT OF CLASS

This class describes the first-working level. Positions in this level plan, design, or monitor construction of facilities or remodeling projects. The work entails ensuring that designs and construction are accomplished within standards, specifications, contracts, and codes. Positions may review or monitor the work of others, including contracted architectural services.

CLASS SERIES DESCRIPTION (Cont'd.)

ARCHITECT

July 1, 2002

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to carry out the process. This includes determining how the operation will be completed. For example, within the guidelines of the agency master plan, positions decide how to plan and evaluate the design and construction of building projects. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices. For example, due to construction problems, positions consider numerous design solutions to develop changes to plans and specifications.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study architectural and engineering information to determine what it means and how it fits together in order to get practical solutions in the form of designs or constructed facilities. Guidelines in the form of standards, specifications, contracts, plans, or local policies and processes exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. For example, positions choose the most appropriate design specification in accordance with codes and standards.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of either of the following:

Securing regulatory compliance by issuing or revoking licenses and persuading or training others to correct problems. Regardless of the methods used to attempt to obtain compliance, the position can ultimately rely on legal authority to impose sanctions and penalties. For example, positions review construction activities for compliance with specifications and codes.

Advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions and behaviors. For example, positions advise agency managers on design parameters to influence cost containment issues.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team.

CLASS SERIES DESCRIPTION (Cont'd.)

ARCHITECT

July 1, 2002

ARCHITECT I

I2A3XX

CONCEPT OF CLASS

This class describes the fully-operational, licensed level. In addition to the work described by the Designer/Planner class, positions in this level review and approve design and "as-constructed" plans to ensure conformance to contract requirements and design principles and standards. Positions consult with engineers and maintenance personnel to identify and solve repair or remodeling problems. Included is work with budgetary and purchasing positions to establish contractual relationships to accomplish the architectural work. This class differs from the Designer/Planner class in the Decision Making, Complexity, and Purpose of Contact factors.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. For example, positions decide the planning and designing operations needed to complete design projects. The general pattern, program, or system exists but must be individualized. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. For example, positions choose the architectural design principles to use on new construction plans. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

Complexity -- The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of architectural design and construction theories, concepts, and principles in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. While general policy, precedent, or non-specific practices exist, they are inadequate so they are relevant only through approximation or analogy. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing guidelines so they can be applied to particular circumstances and to deal with emergencies. For example, when evaluating design plans, positions apply architectural concepts and principles to determine the appropriateness of designs.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of at least two of the following:

CLASS SERIES DESCRIPTION (Cont'd.)

ARCHITECT

July 1, 2002

Advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions and behaviors. For example, positions guide agency planners and boards on architectural matters to influence building styles and functions.

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories. This goes beyond what has been learned in training or repeating information that is available in another format. For example, positions clarify the intent of unfamiliar architectural requirements in documents released for bid.

Negotiating as an official representative of one party in order to obtain support or cooperation where there is no formal rule or law to fall back on in requiring such action or change from the other party. Such negotiation has fiscal or programmatic impact on an agency. In reaching settlements or compromises, the position does not have a rule or regulation to enforce but is accountable for the function. For example, positions negotiate settlement of design modifications to agency contracts.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

ARCHITECT II

I2A4XX

CONCEPT OF CLASS

This class describes the work leader or staff authority level. In addition to work described by the Architect I class, positions in this level have responsibility for assigning and reviewing the work of other Architects. This class also describes the staff authority level where positions function as the agency authority on an architectural field and are relied upon by managers and peers for expert consultation. This class differs from the Architect I in the Decision Making, Complexity, and Line/Staff Authority factors.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the interpretive level, as described here. Within limits of the strategic master plan and allocated human and fiscal resources, choices involve determining tactical plans to achieve the objectives established by the higher management (strategic) level. This involves establishing what processes will be done, developing the budget, and developing the staffing patterns and work units in order to deploy staff. This level includes inventing and changing systems and guidelines that will be applied by others statewide. For example, positions determine plans and manpower needs to complete all

CLASS SERIES DESCRIPTION (Cont'd.)

ARCHITECT

July 1, 2002

components of the agency master buildings plan. By nature, this is the first level where positions are not bound by processes and operations in their own programs as a framework for decision making and there are novel or unique situations that cause uncertainties that must be addressed at this level. Through deliberate analysis and experience with these unique situations, the manager or expert determines the systems, guidelines, and programs for the future. For example, positions analyze preventative maintenance needs and determine the guidelines used by physical plant managers in implementing such.

Complexity -- The nature of, and need for, analysis and judgment is strategic, as described here. Positions develop guidelines to implement a program that maintains the agency's mission. Guidelines do not exist for most situations. In directive situations, positions use judgment and resourcefulness to interpret circumstances in a variety of situations and establish guidelines that direct how a departmental/ agency program will be implemented. For example, positions establish agency master building plans which direct construction and remodeling efforts.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of at least two of the following:

Advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions and behaviors. For example, positions guide agency planners and boards on architectural matters to influence building styles and functions.

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories. This goes beyond what has been learned in training or repeating information that is available in another format. For example, positions clarify the intent of unfamiliar architectural requirements in documents released for bid.

Negotiating as an official representative of one party in order to obtain support or cooperation where there is no formal rule or law to fall back on in requiring such action or change from the other party. Such negotiation has fiscal or programmatic impact on an agency. In reaching settlements or compromises, the position does not have a rule or regulation to enforce but is accountable for the function. For example, positions negotiate agreements with local government agencies on variations to building codes which have programmatic effect on the agency master building plan.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a work leader or staff authority. The work leader is partially accountable for the work product of two or more full-time equivalent positions, including timeliness, correctness, and soundness. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. Typical elements of direct control over other positions by a work leader include assigning tasks, monitoring progress and work flow, checking the product, scheduling work, and establishing work standards. The work leader provides input into supervisory decisions made at higher levels, including signing leave requests and approving work hours. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

CLASS SERIES DESCRIPTION (Cont'd.)

ARCHITECT

July 1, 2002

OR

The staff authority is a pacesetter who has a rare level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. This authority directly influences management decisions at least on an agency-wide basis. Managers and peers recognize and seek this level of technical guidance and direction for development of an agency-wide system or regarding the application of a statewide system within the agency or to its clients. For example, such positions influence agency managers on the requirements of style and function for state buildings.

ARCHITECT III

I2A5XX

CONCEPT OF CLASS

This class describes the supervisory or senior authority level. Positions in this level direct architectural or engineering units for an agency. Positions have responsibility for decisions which impact the pay, status, or tenure of others. This class differs from the Architect II class in the Line/Staff Authority factor only.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the interpretive level, as described here. Within limits of the strategic master plan and allocated human and fiscal resources, choices involve determining tactical plans to achieve the objectives established by the higher management (strategic) level. This involves establishing what processes will be done, developing the budget, and developing the staffing patterns and work units in order to deploy staff. This level includes inventing and changing systems and guidelines that will be applied by others statewide. For example, positions determine plans and manpower needs to complete all components of the agency master buildings plan. By nature, this is the first level where positions are not bound by processes and operations in their own programs as a framework for decision making and there are novel or unique situations that cause uncertainties that must be addressed at this level. Through deliberate analysis and experience with these unique situations, the manager or expert determines the systems, guidelines, and programs for the future. For example, positions analyze preventative maintenance needs and determine the guidelines used by physical plant managers in implementing such.

Complexity -- The nature of, and need for, analysis and judgment is strategic, as described here. Positions develop guidelines to implement a program that maintains the agency's mission. Guidelines do not exist for most situations. In directive situations, positions use judgment and resourcefulness to interpret circumstances in a variety of situations and establish guidelines that direct how a departmental/agency program will be implemented. For example, positions establish agency master building plans which direct construction and remodeling efforts.

CLASS SERIES DESCRIPTION (Cont'd.)

ARCHITECT

July 1, 2002

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of at least two of the following:

Advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions and behaviors. For example, positions guide agency planners and boards on architectural matters to influence building styles and functions.

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories. This goes beyond what has been learned in training or repeating information that is available in another format. For example, positions clarify the intent of unfamiliar architectural requirements in documents released for bid.

Negotiating as an official representative of one party in order to obtain support or cooperation where there is no formal rule or law to fall back on in requiring such action or change from the other party. Such negotiation has fiscal or programmatic impact on an agency. In reaching settlements or compromises, the position does not have a rule or regulation to enforce but is accountable for the function. For example, positions negotiate agreements with local government agencies on variations to building codes, which have programmatic effect on the agency master building plan.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a unit supervisor or senior authority. The unit supervisor is accountable, including signature authority, for actions and decisions that directly impact the pay, status, and tenure of three or more full-time equivalent positions. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

OR

The senior authority is a pacesetter who has a unique level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. It is an essential component of the work assignment that has been delegated by management to the position. This authority directly influences management decisions beyond the agency. Managers and peers seek this level of technical guidance and direction as the designer of a statewide system or in a subject area for other areas of state government. Managers and peers, both internally and externally to the agency, rely on this pacesetter when making decisions regarding the direction that policy, programs, and systems should take in the pacesetter's field of expertise. For example, positions influence managers and peers beyond the agency in the direction that architectural programs should proceed.

CLASS SERIES DESCRIPTION (Cont'd.)

ARCHITECT

July 1, 2002

ENTRANCE REQUIREMENTS

Minimum entry requirements and general competencies for classes in this series are contained in the State of Colorado Department of Personnel & Administration web site.

For purposes of the Americans with Disabilities Act, the essential functions of specific positions are identified in the position description questionnaires and job analyses.

CLASS SERIES HISTORY

Effective 7/1/02 (DLF). PSE System Maintenance Study. No changes. Published as proposed 5/15/02.

Effective 7/1/00 (DLF). Design Intern (I2A1) abolished as part of the annual elimination of unused classes. Published proposed 4/00.

Effective 9/1/93 (DLF). Job Evaluation System Revision project. Published as proposed 6/1/93.

Revised 2/1/85. Changed grade and relationship, Facilities Planning Officer (A3628).

Revised 7/1/80. Changed nature of work and entrance requirements, Architect (A3603-06).

Revised 7/1/79. Changed grade and relationship, Facilities Planning Officer (A3628).

Revised 7/1/78. Changed nature of work and entrance requirements, Facilities Planning Officer (A3628).

Created 7/1/77. Facilities Planning Officer (A3628).

Revised 3/1/76. Changed title and entrance requirements, Intern-In-Architecture (A3601-02).

Created 1/1/75. Architects (A3601-06).

CLASS SERIES DESCRIPTION (Cont'd.)**ARCHITECT****July 1, 2002****SUMMARY OF FACTOR RATINGS**

Class Level	Decision Making	Complexity	Purpose of Contact	Line/Staff Authority
Designer/Planner	Operational	Patterned	Secure or Advise	Indiv. Contributor
Architect I	Process	Formulative	* Advise, Clarify, or Negotiate	Indiv. Contributor
Architect II	Interpretive	Strategic	* Advise, Clarify, or Negotiate	Work Leader or Staff Authority
Architect III	Interpretive	Strategic	* Advise, Clarify, or Negotiate	Unit Supervisor or Senior Authority

* Must have 2 of 3.

ISSUING AUTHORITY: Colorado Department of Personnel & Administration



STATE OF COLORADO

CLASS SERIES DESCRIPTION

July 1, 2002

ELECTRONIC ENGINEER

I2B1TX TO I2B4XX

DESCRIPTION OF OCCUPATIONAL WORK

This class series uses four levels in the Physical Science and Engineering occupational group and describes professional engineering work in the acquisition, installation, and maintenance of electronics equipment and services to state agencies. The work includes planning, organizing, and implementing telecommunications and electronic service for the needs of state agencies in the areas of voice and digital transmissions, media broadcasting, radio communications, computer links, or other state-of-the art electronic capabilities. The work includes advising agency management on the feasibility and costs associated with acquiring electronic capabilities. Positions may work in one or more of the areas of design and installation or the maintenance and repair of existing equipment and capabilities. The work may also include providing similar services to local agencies who wish to use these positions serving in an advisory capacity for the state. In lieu of licensure by the Colorado State Board of Registration for Professional Engineers and Professional Land Surveyors, some positions may require licensure by the Federal Communications Commission (FCC).

INDEX: Electronic Engineer I begins on this page, Electronic Engineer II begins on page 3, Electronic Engineer III begins on page 4, and Electronic Engineer IV begins on page 6.

ELECTRONIC ENGINEER I

I2B1TX

CONCEPT OF CLASS

This class describes the fully-operational level. Positions in this level plan, design, and oversee the installation or maintenance of telecommunications and electronic capabilities throughout the state. Positions identify equipment replacement or upgrade requirements to higher level supervisors and managers for needed funding and planning. Positions work with customers to identify specific needs and capabilities before pursuing solutions. The work may include

CLASS SERIES DESCRIPTION (Cont'd.)

ELECTRONIC ENGINEER

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research of new equipment and contacts with industry sales representatives to identify equipment capabilities, cost, and availability. Positions work with purchasing personnel to develop bid specifications and evaluate proposals for adequacy. Positions may supervise the work of technicians or specialists performing installation or maintenance activities.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. The general pattern, program, or system exists but must be individualized. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system. For example, positions decide the maintenance operations needed to repair and maintain telecommunications sites.

Complexity -- The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of electronic engineering theories, concepts, and principles in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. While general policy, precedent, or non-specific practices exist, they are inadequate so they are relevant only through approximation or analogy. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing guidelines so they can be applied to particular circumstances and to deal with emergencies. For example, positions analyze the importance of engineering principles when designing replacement systems.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories or marketing a product or service. This goes beyond what has been learned in training or repeating information that is available in another format. For example, positions clarify the intent of communications policies to agency managers and directors.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

CLASS SERIES DESCRIPTION (Cont'd.)

ELECTRONIC ENGINEER

July 1, 2002

ELECTRONIC ENGINEER II

I2B2XX

CONCEPT OF CLASS

This class describes the work leader or staff authority level. In addition to work described by the lower class, positions in this level have work leader responsibility over other engineers. The work includes assigning or checking work, instructing or answering questions, and providing input to supervisors on performance. This class also includes those positions functioning as staff authorities in a particular field of electronic engineering where managers and peers rely on the position for expert advice. This class differs from the Electronic Engineer I in the Line/Staff Authority factor only.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. The general pattern, program, or system exists but must be individualized. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system. For example, positions individualize operational and maintenance processes for telecommunications services to state and local agencies.

Complexity -- The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of electronic engineering theories, concepts, and principles in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. While general policy, precedent, or non-specific practices exist, they are inadequate so they are relevant only through approximation or analogy. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing guidelines so they can be applied to particular circumstances and to deal with emergencies. For example, positions analyze the importance of engineering principles when designing replacement systems.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories or marketing a product or service. This goes beyond what has been learned in training or repeating information that is available in another format. For example, positions clarify the intent of communications policies to agency managers and directors.

CLASS SERIES DESCRIPTION (Cont'd.)

ELECTRONIC ENGINEER

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Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a work leader or staff authority. The work leader is partially accountable for the work product of two or more full-time equivalent positions, including timeliness, correctness, and soundness. At least one of the subordinate positions must be in the same series, telecommunications/electronic specialist, or at a comparable conceptual level. Typical elements of direct control over other positions by a work leader include assigning tasks, monitoring progress and work flow, checking the product, scheduling work, and establishing work standards. The work leader provides input into supervisory decisions made at higher levels, including signing leave requests and approving work hours. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

OR

The staff authority is a pacesetter who has a unique level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. It is an essential component of the work assignment that has been delegated by management to the position. This authority directly influences management decisions within an agency. For example, management relies on such a position when making decisions regarding the direction that policy or a program should take in the staff authority's field of expertise. Managers and peers recognize and seek this level of technical guidance and direction regarding the application of a program or system within the agency or to its clients.

ELECTRONIC ENGINEER III

I2B3XX

CONCEPT OF CLASS

This class describes the first-level supervisor or senior authority level. Positions in this level direct the operations of a unit accomplishing electronic engineering support for state agencies. In addition to overseeing the work described in lower classes, positions have responsibility for decisions that affect the pay, status, or tenure of others. This class also describes those rare positions functioning as authorities for an electronic engineering field beyond their agency. This class differs from the Electronic Engineer II in the Line/Staff Authority factor only.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. The general pattern, program, or system exists but must be individualized. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of

CLASS SERIES DESCRIPTION (Cont'd.)

ELECTRONIC ENGINEER

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known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system. For example, positions decide the appropriate process for identifying and acquiring new electronic transmission capabilities for agencies.

Complexity -- The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of electronic engineering theories, concepts, and principles in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. While general policy, precedent, or non-specific practices exist, they are inadequate so they are relevant only through approximation or analogy. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing guidelines so they can be applied to particular circumstances and to deal with emergencies. For example, positions analyze electronic engineering principles in selecting appropriate replacement systems for upgrading capabilities and reliabilities.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories or marketing a product or service. This goes beyond what has been learned in training or repeating information that is available in another format. For example, positions clarify the intent of communications policies to agency managers and directors.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a unit supervisor or senior authority. The unit supervisor is accountable, including signature authority, for actions and decisions that directly impact the pay, status, and tenure of three or more full-time equivalent positions. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

OR

The senior authority is a pacesetter who has a unique level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. It is an essential component of the work assignment that has been delegated by management to the position. This authority directly influences management decisions beyond the agency. Managers and peers seek this level of technical guidance and direction as the designer of a statewide system or in a subject area for other areas of state government. Managers and peers, both internally and externally to the agency, rely on this pacesetter when making decisions regarding the direction that policy, programs, and systems should take in the pacesetter's field of expertise.

CLASS SERIES DESCRIPTION (Cont'd.)

ELECTRONIC ENGINEER

July 1, 2002

ELECTRONIC ENGINEER IV

I2B4XX

CONCEPT OF CLASS

This class describes the second-level supervisor and chief electronic engineer in an agency. Positions in this level establish telecommunications and electronics support programs for the state. The work includes working state wide issues and requirements and coordinating these with managers and directors. Positions also have responsibility for decisions affecting the pay, status, or tenure of other positions. This class differs from the Electronic Engineer III in all factors.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the interpretive level, as described here. Within limits of the strategic master plan and allocated human and fiscal resources, choices involve determining tactical plans to achieve the objectives established by the higher management (strategic) level. This involves establishing what processes will be done, developing the budget, and developing the staffing patterns and work units in order to deploy staff. For example, positions at this level decide the operation and maintenance levels and units to support agency electronics systems. This level includes inventing and changing systems and guidelines that will be applied by others statewide. By nature, this is the first level where positions are not bound by processes and operations in their own programs as a framework for decision making and there are novel or unique situations that cause uncertainties that must be addressed at this level. Through deliberate analysis and experience with these unique situations, the manager or expert determines the systems, guidelines, and programs for the future. For example, positions decide which type of technology will be used for unique types of communications requirements.

OR

The decisions regularly made are at the programmatic level, as described here. Within limits set by organizational policy, general directives, overall goals and objectives, and allocated resources, choices involve formulating or adjusting programs, specifying program objectives, and allocating human and fiscal resources among constituent programs. This involves independently, and under conditions of uncertainty, determining what has been done, what can be done, proposals for long term policy, and estimates of what new resources are required. The long-term strategic plans, purposes, and staffing determined by this level require integration with other programs in the overall plan. Program, as used here, is defined by the mission of an agency or division as opposed to a segment or piece of a program, such as planning, program evaluation, etc. This level does not describe positions that are applying a program controlled by another agency which has the authority and accountability for it. For example, positions at this level decide communications program resources and capabilities for state-wide, government planning.

CLASS SERIES DESCRIPTION (Cont'd.)

ELECTRONIC ENGINEER

July 1, 2002

Complexity -- The nature of, and need for, analysis and judgment is strategic, as described here. Positions develop guidelines to implement a program that maintains the agency's mission. Guidelines do not exist for most situations. In directive situations, positions use judgment and resourcefulness to interpret circumstances in a variety of situations and establish guidelines that direct how a departmental/ agency program will be implemented. For example, positions develop guidelines which direct communications or electronic programs throughout state agencies.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of both of the following:

Negotiating as an official representative of one party in order to obtain support or cooperation where there is no formal rule or law to fall back on in requiring such action or change from the other party. Such negotiation has fiscal or programmatic impact on an agency. In reaching settlements or compromises, the position does not have a rule or regulation to enforce but is accountable for the function. For example, positions negotiate agreements with other governmental agencies for mutual support agreements.

Defending, arguing, or justifying an agency's position in formal hearings or court where the position is an official representative of one party. For example, positions justify communications needs before legislative committees.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a manager or leading authority. The manager must be accountable for multiple units through the direct supervision of at least two subordinate Unit Supervisors; and, have signature authority for actions and decisions that directly impact pay, status, and tenure. Elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, second-level signature on performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

OR

The leading authority is a pacesetter who has a rare level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. It is an essential component of the work assignment that has been delegated by management to the position. This authority directly influences management decisions and peers in the profession outside of state government. Managers and peers beyond state government recognize and seek this level of technical guidance and direction because of the recognized expertise in a subject area. For example, program managers and colleagues in other states rely on this regional or national pacesetter when making decisions regarding the direction of their policy, programs, and systems in the pacesetter's field of expertise. This reliance on, and delegation of, primary responsibility for influencing management direction, including representing the state regionally or nationally, separates this level of staff authority from all others.

CLASS SERIES DESCRIPTION (Cont'd.)

ELECTRONIC ENGINEER

July 1, 2002

ENTRANCE REQUIREMENTS

Minimum entry requirements and general competencies for classes in this series are contained in the State of Colorado Department of Personnel & Administration web site.

For purposes of the Americans with Disabilities Act, the essential functions of specific positions are identified in the position description questionnaires and job analyses.

CLASS SERIES HISTORY

Effective 7/1/02 (DLF). PSE System Maintenance Study. No changes. Published as proposed 5/15/02.

Effective 9/1/93 (DLF). Job Evaluation System Revision project. Published as proposed 6/1/93.

Revised 1/1/92. Changed occupational group, State Communications Director (A2571).

Revised 7/1/86. Changed grades and relationships, Electronic Engineers (A2555-57).

Revised 7/1/85. Changed nature of work and entrance requirements, Electronic Engineers (A2555-57).

Revised 7/1/81. Changed relationship, State Communications Director (A2571).

Revised 3/1/81. Changed nature of work and entrance requirements, State Communications Director (A2571).

Revised 7/1/80. Changed relationship, State Communications Director (A2571).

Created 1/1/75.

SUMMARY OF FACTOR RATINGS

Class Level	Decision Making	Complexity	Purpose of Contact	Line/Staff Authority
Electronic Engineer I	Process	Formulative	Clarify	Indiv. Contributor
Electronic Engineer II	Process	Formulative	Clarify	Work Leader or Staff Authority
Electronic Engineer III	Process	Formulative	Clarify	Unit Supervisor or Senior Authority
Electronic Engineer IV	Interpretive or Programmatic	Strategic	Negotiate & Defend	Manager or Leading Authority

ISSUING AUTHORITY: Colorado Department of Personnel & Administration



STATE OF COLORADO

CLASS SERIES DESCRIPTION

July 1, 2002

ENGINEER

I2C11* TO I2C7**

Specialty Areas

A. Civil
B. Electrical
C. Environmental/Health

D. Mechanical
E. Petroleum/Mining
F. Other

DESCRIPTION OF OCCUPATIONAL WORK

This class series uses seven levels in the Physical Sciences and Engineering occupational group and describes professional level work in an engineering specialty. Engineering consists of the performance of work requiring the use of mathematics, chemistry, physics, and engineering sciences, including the principles and methods of engineering analysis and design in specific disciplines.

As the work described by this class series constitutes the practice of engineering, positions at the Professional Engineer I and higher classes require licensure per CRS 12-25-101, et. seq. In order to meet this statutory license requirement, positions in the Engineer-In-Training II and III classes are expected to be enrolled in the Engineer Intern program with the State Professional Engineer and Professional Land Surveyor Board, and progress towards licensure.

INDEX: Engineer-in-Training I and Engineer-in-Training II begins on page 2, Engineer-in-Training III begins on page 3, Professional Engineer I begins on page 4, Professional Engineer II begins on page 6, Professional Engineer III begins on page 8, and Professional Engineer IV begins on page 10.

CLASS SERIES DESCRIPTION (Cont'd.)

ENGINEER

July 1, 2002

ENGINEER-IN-TRAINING I

I2C1I*

CONCEPT OF CLASS

This class describes the entry level engineer. Work is designed to train positions for a higher level in the class series. Although tasks are similar to those of the first-working level, assignments are structured and performed with direction and assistance from others. Positions carry out established work processes and operations by learning to apply and follow procedures, techniques, rules, and regulations. Once training has been completed, the position is to be moved to the next level. Positions should not remain in this class indefinitely.

ENGINEER-IN-TRAINING II

I2C2T*

CONCEPT OF CLASS

This class describes the first-working level. Positions in this level build upon the basic engineering theories, concepts, and principles to become aware of and familiar with procedures and practices of their specialty area. The work includes utilization of most of the practices and methodologies of the agency and may be assigned tasks of increasing responsibilities requiring some originality and judgment. Completed work is reviewed by higher level engineers.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to carry out the process. This includes determining how the operation will be completed. For example, positions decide how plans or proposals will be analyzed for conformance to bid requirements. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study engineering information to determine what it means and how it fits together in order to get practical solutions in the form of design plans or built structures. Guidelines in the form of standards, specifications, plans, manuals, or procedures exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. For example, positions select the most appropriate testing methods for ensuring contract compliance.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of any of the following:

CLASS SERIES DESCRIPTION (Cont'd.)

ENGINEER

July 1, 2002

Exchanging or collecting information with contacts. This involves giving learned information that is readily understandable by the recipient or collecting factual information in order to solve factual problems, errors, or complaints. For example, positions collect survey data to solve design problems.

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. For example, positions probe complaints to identify construction delays.

Securing regulatory compliance by issuing or revoking licenses and persuading or training others to correct problems. Regardless of the methods used to attempt to obtain compliance, the position can ultimately rely on legal authority to impose sanctions and penalties. For example, positions train others on inspection or testing requirements.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team.

ENGINEER-IN-TRAINING III

I2C3**

CONCEPT OF CLASS

This class describes the fully-operational, non-licensed engineer. Positions in this level perform work with the responsibility to plan, organize and conduct engineering work on a variety of representative phases or projects. This class differs from the previous class in the Decision Making factor.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. For example, positions determine the set of review and testing operations to insure contract completion within terms and conditions. The general pattern, program, or system exists but must be individualized. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. For example, positions apply known engineering principles in deciding the appropriate design or construction changes. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

CLASS SERIES DESCRIPTION (Cont'd.)

ENGINEER

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Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study engineering information to determine what it means and how it fits together in order to get practical solutions in the form of designs, construction plans, or engineering reports. Guidelines in the form of engineering standards or specifications exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. For example, positions select the most appropriate engineering specification to use for changes in equipment specifications. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of either of the following:

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. For example, positions probe complaints to identify construction delays.

Securing regulatory compliance by issuing or revoking licenses and persuading or training others to correct problems. Regardless of the methods used to attempt to obtain compliance, the position can ultimately rely on legal authority to impose sanctions and penalties. For example, positions train others on inspection or testing requirements.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor or as a work leader. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team.

OR

The work leader is partially accountable for the work product of two or more full-time equivalent positions, including timeliness, correctness, and soundness. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. Typical elements of direct control over other positions by a work leader include assigning tasks, monitoring progress and work flow, checking the product, scheduling work, and establishing work standards. The work leader provides input into supervisory decisions made at higher levels, including signing leave requests and approving work hours. This level may include positions performing most/all supervisory elements that do not fully meet the criteria for the next level in this factor.

PROFESSIONAL ENGINEER I

I2C4**

CONCEPT OF CLASS

This class describes the fully-operational, professional (licensed) engineer. Positions in this level apply the engineering sciences and mathematics to analysis or design of projects or programs

CLASS SERIES DESCRIPTION (Cont'd.)

ENGINEER

July 1, 2002

with engineering components. The work typically includes duties as responsible charge engineer which may involve lower level engineering positions. This class is distinguished from the Engineer-In-Training III class in professional (licensed) responsibility for engineering as is reflected in the higher level of Complexity.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. For example, positions determine sets of inspection, testing, fiscal review, or safety compliance review operations to be used in analyzing engineering plan designs for new facility construction. The general pattern, program, or system exists but must be individualized. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. For example, positions decide solutions to construction problems based on a detailed examination of engineering principles and standards. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

Complexity -- The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of engineering and mathematical theories, concepts, and principles in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. While general policy, precedent, or non-specific practices exist, they are inadequate so they are relevant only through approximation or analogy. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing engineering guidelines so they can be applied to particular circumstances and to deal with emergencies. For example, positions tailor existing engineering specifications to deal with unique design needs.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of any of the following:

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. For example, positions examine structure failures to determine causes or repair needs.

Securing regulatory compliance by issuing or revoking licenses and persuading or training others to correct problems. Regardless of the methods used to attempt to obtain compliance, the position can ultimately rely on legal authority to impose sanctions and penalties. For example, positions inspect conditions of structures or earthwork to ensure dams meet safety requirements.

CLASS SERIES DESCRIPTION (Cont'd.)

ENGINEER

July 1, 2002

Advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions and behaviors. For example, positions advise others on maintenance requirements to preclude failures or structural faults.

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories. This goes beyond what has been learned in training or repeating information that is available in another format. For example, positions clarify the rationale behind engineering standards for design features.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor, or work leader. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team. This level may include positions performing most/all supervisory elements that do not fully meet the criteria for the next level in this factor.

OR

The work leader is partially accountable for the work product of two or more full-time equivalent positions, including timeliness, correctness, and soundness. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. Typical elements of direct control over other positions by a work leader include assigning tasks, monitoring progress and work flow, checking the product, scheduling work, and establishing work standards. The work leader provides input into supervisory decisions made at higher levels, including signing leave requests and approving work hours. This level may include positions performing most/all supervisory elements that do not fully meet the criteria for the next level in this factor.

PROFESSIONAL ENGINEER II

I2C5**

CONCEPT OF CLASS

This class describes the supervisor or staff authority. In addition to work described in the Professional Engineer I class, positions in this level have responsibilities as unit supervisors or senior authorities with higher levels of decisions making or strategic planning duties. Positions direct lower level engineering positions in accomplishing professional engineering programs or projects. This class differs from the Professional Engineer I level in the Line/Staff Authority factor and possibly in the Decision Making, Complexity, and Purpose of Contact factors.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve

CLASS SERIES DESCRIPTION (Cont'd.)

ENGINEER

July 1, 2002

determining the process, including designing the set of operations. For example, positions determine the most effective way to analyze engineering studies or proposals. The general pattern, program, or system exists but must be individualized. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. For example, positions decide solutions to construction problems based on a detailed examination of engineering principles and standards. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

OR

The decisions regularly made are at the interpretive level, as described here. Within limits of the strategic master plan and allocated human and fiscal resources, choices involve determining tactical plans to achieve the objectives established by the higher management (strategic) level. This involves establishing what processes will be done, developing the budget, and developing the staffing patterns and work units in order to deploy staff. For example, positions develop unit budgets and staffing requirements for operating an engineering unit. This level includes inventing and changing systems and guidelines that will be applied by others statewide. By nature, this is the first level where positions are not bound by processes and operations in their own programs as a framework for decision making and there are novel or unique situations that cause uncertainties that must be addressed at this level. Through deliberate analysis and experience with these unique situations, the manager or expert determines the systems, guidelines, and programs for the future. For example, positions determine design guidelines to be used for an agency's engineering program.

Complexity -- The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of engineering theories, concepts, and principles in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. For example, positions tailor engineering specifications to fit unusual design requirements. While general policy, precedent, or non-specific practices exist, they are inadequate so they are relevant only through approximation or analogy. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing guidelines so they can be applied to particular circumstances and to deal with emergencies.

OR

The nature of, and need for, analysis and judgment is strategic, as described here. Positions develop guidelines to implement a program that maintains the agency's mission. Guidelines do not exist for most situations. In directive situations, positions use judgment and resourcefulness to interpret circumstances in a variety of situations and establish guidelines that direct how a

CLASS SERIES DESCRIPTION (Cont'd.)

ENGINEER

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departmental/agency program will be implemented. For example, positions interpret engineering needs and establish engineering standards or guides for an agency's facilities program.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of either of the following:

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories or marketing a product or service. This goes beyond what has been learned in training or repeating information that is available in another format. For example, positions train others on new, unfamiliar design or construction methods.

Negotiating as an official representative of one party in order to obtain support or cooperation where there is no formal rule or law to fall back on in requiring such action or change from the other party. Such negotiation has fiscal or programmatic impact on an agency. In reaching settlements or compromises, the position does not have a rule or regulation to enforce but is accountable for the function. For example, positions negotiate terms of contract changes due to design deficiencies.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a unit supervisor or staff authority. The unit supervisor is accountable, including signature authority, for actions and decisions that directly impact the pay, status, and tenure of three or more full-time equivalent positions. At least one of the subordinate positions must be a Professional Engineer I or at a comparable conceptual level. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer. NOTE: As a tradeoff (in lieu of supervising one Professional Engineer I), positions which supervise one in this series, or at a comparable level, and have Decision Making at the Interpretive level, may also be allocated to this class.

OR

The staff authority is a pacesetter who has a unique level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. It is an essential component of the work assignment that has been delegated by management to the position. This authority directly influences management decisions within an agency. For example, management relies on such a position when making decisions regarding the direction that policy or a program should take in the staff authority's field of expertise. Managers and peers recognize and seek this level of technical guidance and direction regarding the application of a program or system within the agency or to its clients. For example, such a position influences peers and managers alike on the application of new project management systems.

CLASS SERIES DESCRIPTION (Cont'd.)

ENGINEER

July 1, 2002

PROFESSIONAL ENGINEER III

I2C6**

CONCEPT OF CLASS

This class describes the second-level supervisor or senior authority. In addition to the work described by the previous professional levels, positions in this level have responsibilities as a second level supervisor or as a senior authority in a field of engineering. This class differs from the Professional Engineer II in the Line/Staff Authority factor and possibly in Decision Making and Complexity factors.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the interpretive level, as described here. Within limits of the strategic master plan and allocated human and fiscal resources, choices involve determining tactical plans to achieve the objectives established by the higher management (strategic) level. This involves establishing what processes will be done, developing the budget, and developing the staffing patterns and work units in order to deploy staff. For example, positions develop unit budgets and staffing requirements for operating an engineering unit. This level includes inventing and changing systems and guidelines that will be applied by others statewide. By nature, this is the first level where positions are not bound by processes and operations in their own programs as a framework for decision making and there are novel or unique situations that cause uncertainties that must be addressed at this level. Through deliberate analysis and experience with these unique situations, the manager or expert determines the systems, guidelines, and programs for the future. For example, positions determine design guidelines to be used for an agency's engineering program.

Complexity -- The nature of, and need for, analysis and judgment is strategic, as described here. Positions develop guidelines to implement a program that maintains the agency's mission. Guidelines do not exist for most situations. In directive situations, positions use judgment and resourcefulness to interpret circumstances in a variety of situations and establish guidelines that direct how a departmental/agency program will be implemented. For example, positions interpret engineering needs and establish engineering standards or guides for an agency's facilities program.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of either of the following:

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories. This goes beyond what has been learned in training or repeating information that is available in another format. For example, positions clarify the underlying rationale of design requirements to local environment groups.

Negotiating as an official representative of one party in order to obtain support or cooperation where there is no formal rule or law to fall back on in requiring such action or change from the

CLASS SERIES DESCRIPTION (Cont'd.)

ENGINEER

July 1, 2002

other party. Such negotiation has fiscal or programmatic impact on an agency. In reaching settlements or compromises, the position does not have a rule or regulation to enforce but is accountable for the function. For example, positions negotiate cooperative agreements with local authorities on cost sharing aspects of projects.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a manager or senior authority. The manager must be accountable for multiple units through the direct supervision of at least two subordinate Unit Supervisors; and, have signature authority for actions and decisions that directly impact pay, status, and tenure. Elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, second-level signature on performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

OR

The senior authority is a pacesetter who has a unique level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. It is an essential component of the work assignment that has been delegated by management to the position. This authority directly influences management decisions beyond the agency. Managers and peers seek this level of technical guidance and direction as the designer of a statewide system or in a subject area for other areas of state government. Managers and peers, both internally and externally to the agency, rely on this pacesetter when making decisions regarding the direction that policy, programs, and systems should take in the pacesetter's field of expertise.

PROFESSIONAL ENGINEER IV

I2C7**

CONCEPT OF CLASS

This class describes the highest level engineer in this series. Positions in this level typically have responsibility for directing and administering engineering program areas for such things as long-range plans, equipment and resources, and the integration into other programmatic areas of the agency. A few positions in this class may function as leading authorities. This class differs from the Professional Engineer III in the Decision Making factor and possibly in the Line/Staff Authority factor.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the programmatic level, as described here. Within limits set by organizational policy, general directives, overall goals and objectives, and allocated resources, choices involve formulating or adjusting programs, specifying program objectives, and allocating human and fiscal resources among constituent programs. This involves independently, and under conditions of uncertainty, determining what has been done,

CLASS SERIES DESCRIPTION (Cont'd.)

ENGINEER

July 1, 2002

what can be done, proposals for long term policy, and estimates of what new resources are required. For example, positions determine the allocation of fiscal resources between competing engineering projects. The long-term strategic plans, purposes, and staffing determined by this level require integration with other programs in the overall plan. Program, as used here, is defined by the mission of an agency or division as opposed to a segment or piece of a program, such as planning, program evaluation, etc. This level does not describe positions that are applying a program controlled by another agency which has the authority and accountability for it.

Complexity -- The nature of, and need for, analysis and judgment is strategic, as described here. Positions develop guidelines to implement a program that maintains the agency's mission. Guidelines do not exist for most situations. In directive situations, positions use judgment and resourcefulness to interpret circumstances in a variety of situations and establish guidelines that direct how a departmental/agency program will be implemented. For example, positions establish long range maintenance and repair programs for an agency's physical plant resources.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of negotiating as an official representative of one party in order to obtain support or cooperation where there is no formal rule or law to fall back on in requiring such action or change from the other party. Such negotiation has fiscal or programmatic impact on an agency. In reaching settlements or compromises, the position does not have a rule or regulation to enforce but is accountable for the function. For example, positions negotiate cooperative agreements with local authorities on cost sharing aspects of projects.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a manager, leading authority, or senior manager. The manager must be accountable for multiple units through the direct supervision of at least two subordinate Unit Supervisors; and, have signature authority for actions and decisions that directly impact pay, status, and tenure. Elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, second-level signature on performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

OR

The leading authority is a pacesetter who has a rare level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. This authority directly influences management decisions and peers in the profession outside of state government. Managers and peers throughout the nation recognize and seek this level of technical guidance and direction because of the recognized expertise in a subject area.

OR

CLASS SERIES DESCRIPTION (Cont'd.)

ENGINEER

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The senior manager must be accountable for multiple units through the direct supervision of at least two subordinate Managers; and, have signature authority for actions and decisions that directly impact pay, status, and tenure. Elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, second level signature on performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

DEFINITIONS

Civil: a field requiring application of general knowledge of the physical sciences and mathematics underlying specialties of soil mechanics, hydraulics, materials, structures/facilities, transportation/traffic, construction management, surveying, and/or water resources.

Electrical: a field requiring application of mathematics and the physical and engineering sciences as they apply to electrical sources, distribution, equipment, systems, and associated concepts and principles such as motive power, illumination, or the production of electric or magnetic fields. The applications are primarily directed at the design, construction, inspection, or operation of electrical power distribution systems and their uses, high voltage transmission, generation resource planning and load forecasting.

Environmental/Health: a field involving engineering work to improve and protect air, land, and water resources. It requires the application of engineering principles concerned with facilities and systems for controlling pollution and protecting the quality of resources and the environment, and to utilize chemical, biological, and public health services to control or eliminate pollutants. These applications are primarily directed at water and waste water treatment, air pollution, and hazardous material disposal systems.

Mechanical: a field requiring the application of the principles of thermo-dynamics, and other physical, mathematical, and engineering sciences in the design, construction, evaluation, and operation of mechanical systems.

Petroleum/Mining: This is the application of engineering principles dealing with the exploration and development of minerals, oil, and natural gas; the production, transportation, and storage of these products with emphasis upon the controls over their development.

Other: any specialty in other engineering fields not specifically covered by the above definitions or any other state special use classes.

P.E.: A professional engineer who is duly registered with the State Board of Registration for Professional Engineers and Professional Land Surveyors.

ENTRANCE REQUIREMENTS

Minimum entry requirements and general competencies for classes in this series are contained in the State of Colorado Department of Personnel & Administration web site.

CLASS SERIES DESCRIPTION (Cont'd.)

ENGINEER

July 1, 2002

For purposes of the Americans with Disabilities Act, the essential functions of specific positions are identified in the position description questionnaires and job analyses.

CLASS SERIES HISTORY

Effective 7/1/02 (DLF). PSE System Maintenance Study. Changed class titles for the three entry-level classes (I2C1-3). Published as proposed 5/15/02.

Effective 9/1/93 (DLF). Job Evaluation System Revision project. Published as proposed 6/11/93.

Revised 1/1/92. Changed occupational group to PSE, Supv. Public Utilities Engineering Analyst (A1218), Asst Principal Highway Engineer (A3117), Principal Water Resource Engineer (A3132).

Revised 7/1/89. Changed nature of work, options, and entrance requirements, Engineer A – Supv. Prof Engineer (A3136-41).

Revised 7/1/81. Changed relationship, Supv Public Utilities Engineering Analyst (A1218), Asst Principal Highway Engineer (A3117), Principal Water Resource Engineer (A3132).

Revised 7/1/80. Changed grade, relationship, nature of work, and entrance requirements, Supv Public Utilities Engineering Analyst (A1218).

Revised 3/1/80. Changed nature of work and entrance requirements, Principal Water Resource Engineer (A3132).

Revised 12/1/79. Changed entrance requirements, Asst Principal Highway Engineer (A3117).

Revised 11/1/79. Changed entrance requirements, Principal Water Resource Engineer (A3132).

Revised 5/1/78. Changed entrance requirements, Principal Water Resource Engineer (A3132).

Created 10/1/76. Supv Tramway Engineer (A3182).

Created 1/1/75. Supv Public Utilities Engineering Analyst (A1218), Asst Principal Highway Engineer (A3117), Principal Water Resource Engineer (A3132), Engineer A - Supv Prof Engineer (A3136-41).

CLASS SERIES DESCRIPTION (Cont'd.)**ENGINEER****July 1, 2002****SUMMARY OF FACTOR RATINGS**

Class Level	Decision Making	Complexity	Purpose of Contact	Line/Staff Authority
Engineer-in-Training I	n/a	n/a	n/a	n/a
Engineer-in-Training II	Operational	Patterned	Exchange, Detect, or Secure	Indiv. Contributor
Engineer-in-Training III	Process	Patterned	Detect or Secure	Indiv. Contributor or Work Leader
Professional Engineer I	Process	Formulative	Detect, Secure, Advise, or Clarify	Indiv. Contributor or Work Leader
Professional Engineer II	Process or Interpretive	Formulative or Strategic	Clarify or Negotiate	Unit Supervisor* or Staff Authority
Professional Engineer III	Interpretive	Strategic	Clarify or Negotiate	Manager or Senior Authority
Professional Engineer IV	Programmatic	Strategic	Negotiate	Manager, Leading Authority, or Senior Manager

*Requires at least one subordinate position at or above the Professional Engineer I level, or have Interpretive level Decision Making.

ISSUING AUTHORITY: Colorado Department of Personnel & Administration



STATE OF COLORADO
CLASS SERIES DESCRIPTION
July 1, 2002

LANDSCAPE ARCHITECT

I2D1IX TO I2D4XX

DESCRIPTION OF OCCUPATIONAL WORK

This class series uses four levels in the Physical Science and Engineering occupational group and describes professional work in landscape architecture. The work entails the planning, design, construction, or modification of landscaping for state agencies. Work involves estimating and designing improvements or modifications to existing grounds and vegetation in concert with facilities engineering, architecture, and maintenance functions. Positions monitor construction or changes in landscape performed by in-house personnel or contractors. The work includes advising managers and directors on landscape projects and standards. This may include the preparation of bid specifications and the evaluation of proposals for contracts.

The work may also include landscape architecture work in support of land development or reclamation, or park-wide infrastructure planning and construction. This work may entail earthwork calculations, designing road and parking areas, environmental analysis, or land-use planning. Positions may also advise or direct grounds personnel in the maintenance of agency landscape.

INDEX: Landscape Architect Intern begins on this page, Landscape Architect I begins on page 2, Landscape Architect II begins on page 3, and Landscape Architect III begins on page 4.

LANDSCAPE ARCHITECT INTERN

I2D1IX

CONCEPT OF CLASS

This class describes the entry level. Work is designed to train positions for a higher level in the class series. Although tasks are similar to those of the first-working level, assignments are structured and performed with direction and assistance from others. Positions carry out

CLASS SERIES DESCRIPTION (Cont'd.)

LANDSCAPE ARCHITECT

July 1, 2002

established work processes and operations by learning to apply and follow procedures, techniques, rules, and regulations. Once training has been completed, the position is to be moved to the next level. Positions should not remain in this class indefinitely.

LANDSCAPE ARCHITECT I

I2D2TX

CONCEPT OF CLASS

This class describes the first working level. Positions in this level design, estimate, and monitor implementation of changes to landscape. The work involves ensuring conformance with agency standards and applicable codes for landscape projects. Positions work closely with engineers and other facility architects to coordinate efforts within the long-range master plan. Positions may provide work direction or advice to technicians or maintenance personnel.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to carry out the process. This includes determining how the operation will be completed. For example, positions decide what portions of landscape need replacing and how it will be accomplished. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices. For example, positions decide the appropriate landscaping design for new construction in accordance with the agency master plan.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study landscape needs and design information to determine what it means and how it fits together in order to get practical solutions in the form of plans for landscape improvements. Guidelines in the form of standards and agency long-range plans exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. For example, positions select the most appropriate landscape materials and designs for reclamation purposes.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of either of the following:

Advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions and behaviors. For example, positions advise facility managers on how to use landscaping to solve traffic problems or water conservation issues.

CLASS SERIES DESCRIPTION (Cont'd.)

LANDSCAPE ARCHITECT

July 1, 2002

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories. This goes beyond what has been learned in training or repeating information that is available in another format. For example, positions clarify the underlying rationale on types of landscaping materials best suited for soil retention purposes.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team.

LANDSCAPE ARCHITECT II

I2D3XX

CONCEPT OF CLASS

This class describes the fully-operational level. Positions in this level establish landscape improvement or change processes for the agency as it plans, designs, and oversees construction or remodeling of landscaping. Positions approve changes or modifications to plans and advise managers on alternative solutions to landscape problems. This class differs from the Landscape Architect I class in the Decision Making factor only.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. The general pattern, program, or system exists but must be individualized. For example, positions decide the process for determining, analyzing, and solving erosion problems. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. For example, positions analyze landscaping models to determine the best solutions for minimizing environmental impacts of land development. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study landscape needs and design information to determine what it means and how it fits together in order to get practical solutions in the form of plans for landscape improvements. Guidelines in the form of standards and agency long-range plans exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of

CLASS SERIES DESCRIPTION (Cont'd.)

LANDSCAPE ARCHITECT

July 1, 2002

guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. For example, positions select the most appropriate landscape materials and designs for reclamation purposes.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of either of the following:

Advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions and behaviors. For example, positions advise facility managers on landscaping solutions to solve traffic problems or to reduce water consumption.

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories. This goes beyond what has been learned in training or repeating information that is available in another format. For example, positions clarify the underlying rationale of types of landscaping models best suited in environmental impact analysis projects.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

LANDSCAPE ARCHITECT III

I2D4XX

CONCEPT OF CLASS

This class describes the work leader or staff authority level. In addition to work described by the Landscape Architect II class, positions in this level have work leader responsibilities for others as they assign and evaluate work to ensure conformance with designs and plans. This class also describes those positions functioning as the agency authority for landscaping architecture whose expertise is relied upon by managers and peers alike. This class differs from the Landscape Architect II class in the Decision Making, Complexity, and Line/Staff Authority factors and possibly in the Purpose of Contact.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. The general pattern, program, or system exists but must be individualized. For example, positions decide the process for determining, analyzing, and solving erosion problems. This individualization requires analysis

CLASS SERIES DESCRIPTION (Cont'd.)

LANDSCAPE ARCHITECT

July 1, 2002

of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. For example, positions analyze landscaping models to determine the best solutions for minimizing environmental impacts of land development. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study landscape needs and design information to determine what it means and how it fits together in order to get practical solutions in the form of plans for landscape improvements. Guidelines in the form of standards and agency long-range plans exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. For example, positions select the most appropriate landscape materials and designs for reclamation purposes.

OR

The nature of, and need for, analysis and judgment is strategic, as described here. Strategic where positions develop guidelines to implement a program that maintains the agency's mission. Guidelines do not exist for most situations. In directive situations, positions use judgment and resourcefulness to interpret circumstances in a variety of situations and establish guidelines that direct how a departmental/agency program will be implemented. For example, positions establish the landscaping guideline for agency master plans which direct future landscaping designs and operations.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of either of the following:

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories. This goes beyond what has been learned in training or repeating information that is available in another format. For example, positions clarify the intent of landscaping solutions to environmental impact projects to other land users.

Negotiating as an official representative of one party in order to obtain support or cooperation where there is no formal rule or law to fall back on in requiring such action or change from the other party. Such negotiation has fiscal or programmatic impact on an agency. In reaching settlements or compromises, the position does not have a rule or regulation to enforce but is accountable for the function.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a work leader or staff authority. The work leader is partially accountable for the work product of two or more full-time equivalent positions, including timeliness, correctness,

CLASS SERIES DESCRIPTION (Cont'd.)

LANDSCAPE ARCHITECT

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and soundness. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. Typical elements of direct control over other positions by a work leader include assigning tasks, monitoring progress and work flow, checking the product, scheduling work, and establishing work standards. The work leader provides input into supervisory decisions made at higher levels, including signing leave requests and approving work hours. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

OR

The staff authority is a pacesetter who has a rare level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. This authority directly influences management decisions at least on an agency-wide basis. Managers and peers recognize and seek this level of technical guidance and direction for development of an agency-wide system or regarding the application of a statewide system within the agency or to its clients.

ENTRANCE REQUIREMENTS

Minimum entry requirements and general competencies for classes in this series are contained in the State of Colorado Department of Personnel & Administration web site.

For purposes of the Americans with Disabilities Act, the essential functions of specific positions are identified in the position description questionnaires and job analyses.

CLASS SERIES HISTORY

Effective 7/1/02 (DLF). PSE System Maintenance Study. No changes. Published as proposed 5/15/02.

Effective 9/1/93 (DLF). Job Evaluation System Revision project. Published as proposed 6/1/93.

Created 1/1/75.

SUMMARY OF FACTOR RATINGS

Class Level	Decision Making	Complexity	Purpose of Contact	Line/Staff Authority
Landscape Architect Intern	na	na	Na	na
Landscape Architect I	Operational	Patterned	Advise or Clarify	Indiv. Contributor
Landscape Architect II	Process	Patterned	Advise or Clarify	Indiv. Contributor
Landscape Architect III	Process	Patterned or Strategic	Clarify or Negotiate	Work Leader or Staff Authority

ISSUING AUTHORITY: Colorado Department of Personnel & Administration



STATE OF COLORADO

CLASS SERIES DESCRIPTION

July 1, 2002

ENVIRONMENTAL PROTECTION SPECIALIST

I3A11* TO I3A6**

Specialty Areas

A. Air Quality
B. Consumer Protection
C. Land Resources
D. Health Physics

E. Waste Management
F. Water Quality
G. Generalists

DESCRIPTION OF OCCUPATIONAL WORK

This class series uses six levels in the Physical Sciences and Engineering occupational group and describes professional scientific application work in monitoring, controlling, preserving, reclaiming, or regulating the environment and natural resources in which people live and work. Positions apply the theories, principles, and models of the physical sciences to planning, implementation, and evaluation of programs aimed at preserving and improving the use of these physical, natural resources and protecting the public health. Positions monitor and inspect facilities and the environment to determine their qualities and identify pollutants and contaminants. Positions work with private companies and governmental agencies to enforce laws and regulations aimed at protecting the public health and safety and/or remediating the environment. Positions work in providing public services as they issue permits, inspect, monitor compliance, and reclaim and revitalize the natural resources and the environment. They also work with contractors and private corporations in preventing hazards or pollutants from entering the environment. Positions review plans, remedial action and design documents, and proposals for compliance with regulations, laws, and policies. The work typically includes researching, developing, and writing regulations. Some positions oversee projects or programs oriented towards removing pollutant or contaminant hazards from existing sources by managing state and federal projects in these areas.

The classes in this series range from the entry level through the second-level supervisor. This class series is distinguished from other scientist or specialist classes by its focus on, and work

CLASS SERIES DESCRIPTION (Cont'd.)
ENVIRONMENTAL PROTECTION SPECIALIST
July 1, 2002

directly with environmental issues, problems, or programs by applying the physical sciences as defined for the above specialty areas.

INDEX: The Environmental Protection Intern and Specialist I begin on this page, the Environmental Protection Specialist II begins on page 3, the Environmental Protection Specialist III begins on page 6, the Environmental Protection Specialist IV begins on page 8, and the Environmental Protection Specialist V begins on page 10.

ENVIRONMENTAL PROTECTION INTERN I3A1I*

CONCEPT OF CLASS

This class describes the entry level. Work is designed to train positions for a higher level in the class series. Although tasks are similar to those of the higher levels, assignments are structured and performed with direction and assistance from others. Positions carry out established work processes and operations by learning to apply and follow procedures, techniques, rules, and regulations. Once training has been completed, the position is to be moved to the next level. Positions should not remain in this class indefinitely.

ENVIRONMENTAL PROTECTION SPECIALIST I I3A2T*

CONCEPT OF CLASS

This class describes the first-working level to this series. Positions in this level learn the procedures, regulations, policies, and statutes dealing with projects or programs in a specialty area. Either as a team member or under the direction of a supervisor or work leader, positions review plans or applications for compliance with specified requirements, search records for background or precedent materials, analyze information, and provide recommendations on inspection or follow-up actions with the consultation of supervisors. Some positions inspect facilities, sites, plants, construction, or operations to obtain information and collect data. The work may include monitoring reclamation or clean-up projects for conformance with contractual obligations. Some positions review or verify public complaints on pollutants, emissions, or waste discharges.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to carry out the process. This includes determining how the operation will be completed. For example, positions develop the inspection guides or decide the frequency and scope for conducting compliance reviews. Positions also determine the best way to handle complaints or decide how to analyze environmental pollution data. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within

CLASS SERIES DESCRIPTION (Cont'd.)
ENVIRONMENTAL PROTECTION SPECIALIST
July 1, 2002

the established process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices. For example, in analyzing water issues, positions decide potential impacts based on established alternative treatment solutions.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study scientific data and reports to determine what it means and how it fits together in order to get practical solutions in the form of compliance actions or cleanup plans. Guidelines in the form of regulations, standards, or limits exist for most situations. For example, in inspecting for product safety, regulations exist for most types of products. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. As an example, waste discharge limits exist for most types of permits and a position chooses the more appropriate.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. For example, positions probe complaints on dumping of hazardous wastes to determine if a violation has occurred.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team.

ENVIRONMENTAL PROTECTION SPECIALIST II I3A3**

CONCEPT OF CLASS

This class describes the fully-operational program specialist. Positions in this level decide the particular operations of their assigned area. Some positions also serve as a member of a multi-disciplinary team evaluating, planning, and implementing a natural resource protection, recovery, remediation, reclamation, or removal project. This involves such things as planning and developing remedial action plans; estimating fiscal and manpower requirements for projects; evaluating applications for permits and licenses; analyzing the public health or environmental impacts of industrial and manufacturing operations, and formulating plans to mitigate their impacts on human health and the environment; conducting tests and studies relating to any of the environmental media; inspecting for and investigating sources of pollutants, diseases, safety hazards, or contaminants; recommending enforcement actions against violators; training others on environmental and public health programs and educating the public on issues and solutions to problems; and preparing reports on program activities and objectives. Some positions also set field inspection procedures, establish quality control measures, certify monitoring equipment operations, and evaluate data for compliance with regulations. Positions may also develop alternative plans for mitigating environmental impacts on natural resources, ecosystems, or on

CLASS SERIES DESCRIPTION (Cont'd.)
ENVIRONMENTAL PROTECTION SPECIALIST
July 1, 2002

public health. As a fully-operational program specialist, this class differs from the Environmental Specialist I class in the Purpose of Contact factor and in either the Decision Making or Complexity factor. Either the Decision Making or the Complexity must be at the higher of the levels listed below.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to carry out the process. This includes determining how the operation will be completed. For example, positions develop the inspection guides or decide the frequency and scope for conducting compliance reviews. Positions also determine the best way to handle complaints or decide how to analyze environmental pollution data. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices. For example, in analyzing water issues, positions decide potential impacts based on established alternative treatment solutions. NOTE: For this class, this level of Decision Making must be with Complexity at the Formulative level.

OR

The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. For example, positions decide the processes for accomplishing unit work based on higher management's program limits and objectives. This may entail such things as setting the permit process, analysis, and approvals or setting the reporting process for safety complaints or recalls. The general pattern, program, or system exists but must be individualized. As an example, a position decides the individualized process to remediate certain kinds of land which is polluted. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. As an example, establishing a permitting process entails deciding what agencies need to review or comment, whether existing processes can cover all types of applications for permits, and whether all background information is readily available to analyze the applications. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study scientific data and reports to determine what it means and how it fits together in order to get practical solutions in the form of remediation plans or environmental mitigation.

CLASS SERIES DESCRIPTION (Cont'd.)
ENVIRONMENTAL PROTECTION SPECIALIST
July 1, 2002

Guidelines in the form of regulations, legal rights, or contamination limits exist for most situations. For example, in inspecting health and food products, inspection standards are specified by federal or state regulations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. As an example, positions must interpret the potential impacts of hazardous wastes based on the specific type of waste or materials available to treat or remove the waste, and the human proximity to exposure. NOTE: For Complexity at this level, Decision Making must be at the Process level.

OR

The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of physical science theories, concepts, and principles in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. While general policy, precedent, or non-specific practices exist, they are inadequate so they are relevant only through approximation or analogy. For example, state health standards may address product safety but they may be inadequate when choosing the appropriate standard to use with evaluating a new consumer product. Positions then must apply the appropriate safety principle to the issue. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing guidelines so they can be applied to particular circumstances and to deal with emergencies. As an example, following a chemical waste spill, positions must adapt the available clean-up guidelines to deal with the emergency. This may involve changing clean-up actions to account for different chemical properties of dissipation.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of at least two of the following:

Exchanging or collecting information with contacts. This involves giving learned information that is readily understandable by the recipient or collecting factual information in order to solve factual problems, errors, or complaints. For example, positions collect emission source data or explain permitting processes to others.

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. As an example, positions probe complaints on possible pollutants or hazards. This can involve interviewing persons and collecting samples of the media to document pollution.

Securing regulatory compliance by issuing or revoking licenses and persuading or training others to correct problems. Regardless of the methods used to attempt to obtain compliance, the position can ultimately rely on legal authority to impose sanctions and penalties. For example, positions inspect facilities and recommend enforcement actions against violators with such things as fines, orders, or possible suspension of licenses.

CLASS SERIES DESCRIPTION (Cont'd.)
ENVIRONMENTAL PROTECTION SPECIALIST
July 1, 2002

Advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions and behaviors. As an example, positions guide local authorities on developing environmental regulations or on solutions to consumer health related issues in order to increase business owners' awareness of potential problems.

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories. This goes beyond what has been learned in training or repeating information that is available in another format. For example, some positions develop training programs to present to licensees or local agencies on the theories of food-borne pathogens or the possible side-effects of water pollutants.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

ENVIRONMENTAL PROTECTION SPECIALIST III I3A4**

CONCEPT OF CLASS

This class describes work leader or a project or team leader working with environmental issues. Positions at this level perform some elements of supervision over others. Typically, these positions assign and monitor work, train newly assigned team members, evaluate work progress and provide redirection when necessary, establish priorities and schedules for work accomplishment, and provide input into performance and tenure to the positions' unit supervisor. This class differs from the Environmental Specialist II class in the Line/Staff Authority factor and may have a higher level of Decision Making or Complexity.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. For example, positions decide the processes for accomplishing unit work based on higher management's program limits and objectives. This may entail such things as setting the permit process, analysis, and approvals or setting the reporting process for safety complaints or recalls. The general pattern, program, or system exists but must be individualized. As an example, a position decides the individualized process to remediate certain kinds of land which is polluted. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination

CLASS SERIES DESCRIPTION (Cont'd.)
ENVIRONMENTAL PROTECTION SPECIALIST
July 1, 2002

requires the application of known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. As an example, establishing a permitting process entails deciding what agencies need to review or comment, whether existing processes can cover all types of applications for permits, and whether all background information is readily available to analyze the applications. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

Complexity -- The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of physical science theories, concepts, and principles in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. While general policy, precedent, or non-specific practices exist, they are inadequate so they are relevant only through approximation or analogy. For example, state health standards address product safety but are inadequate for choosing the appropriate standard to use with evaluating a new consumer product. Positions then must apply the appropriate safety principle to the issue. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing guidelines so they can be applied to particular circumstances and to deal with emergencies. As an example, following a chemical waste spill, positions must adapt the available clean-up guidelines to deal with the emergency. This may involve changing clean-up actions to account for leaching processes that work differently in colder weather.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of at least three of the following:

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. For example, positions investigate reports of radiation leaks to determine compliance with safety design requirements and certification of equipment.

Securing regulatory compliance by issuing or revoking licenses and persuading or training others to correct problems. Regardless of the methods used to attempt to obtain compliance, the position can ultimately rely on legal authority to impose sanctions and penalties. For example, positions have authority to remove equipment certifications or licenses when appropriate.

Advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions and behaviors. As an example, positions advise local authorities on methods of dealing with non-compliant businesses in handling asbestos removal.

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories. This goes beyond what has been learned in training or repeating information that is available in another format. For example, some positions develop courses and seminars to educate users and the general public on consumer health issues or on the intent of clean-up methods.

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Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a work leader or staff authority. The work leader is partially accountable for the work product of two or more full-time equivalent positions, including timeliness, correctness, and soundness. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. Typical elements of direct control over other positions by a work leader include assigning tasks, monitoring progress and work flow, checking the product, scheduling work, and establishing work standards. The work leader provides input into supervisory decisions made at higher levels, including signing leave requests and approving work hours. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

OR

The staff authority is a pacesetter who has a unique level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. It is an essential component of the work assignment that has been delegated by management to the position. This authority directly influences management decisions within an agency. For example, management relies on such a position when making decisions regarding the direction that policy or a program should take in the staff authority's field of expertise. Managers and peers recognize and seek this level of technical guidance and direction regarding the application of a program or system within the agency or to its clients. As an example, an agency authority advises peers and managers on expected side effects of new radiation hazards or the impacts of new emission control technology on the state's ability to meet EPA standards.

ENVIRONMENTAL PROTECTION SPECIALIST IV I3A5**

CONCEPT OF CLASS

This class describes the unit supervisor or senior authority level. In addition to the work described in lower classes, positions in this level supervise others involved in any of the specialty areas of this series. As unit supervisors, positions have accountability for actions and decisions that can impact subordinates' pay, status, or tenure. Positions that function as senior authorities have direct influence over the decisions of others beyond agency boundaries. This class differs from the Environmental Specialist III on its Line/Staff Authority factor and possibly in Decision Making.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. For example, positions decide the processes for accomplishing unit work based on higher management's program limits

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and objectives. This may entail such things as setting the permit process, analysis, and approvals or setting the reporting process for safety complaints or recalls. The general pattern, program, or system exists but must be individualized. As an example, a position decides the individualized process to remediate certain kinds of land which is polluted. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. As an example, establishing a permitting process entails deciding what agencies need to review or comment, whether existing processes can cover all types of applications for permits, and whether all background information is readily available to analyze the applications. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

Complexity -- The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of physical science theories, environmental concepts, and principles in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. As an example, positions adapt reclamation or remediation concepts to individual site circumstances in formulating a remedial action plan. While general policy, precedent, or non-specific practices exist, they are inadequate so they are relevant only through approximation or analogy. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing guidelines so they can be applied to particular circumstances and to deal with emergencies. For example, positions tailor existing test concepts to evaluate new alternative fuels for emission control purposes.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of at least three of the following:

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. For example, positions review the uses and problems with products to validate or refute possible safety or hazard complaints.

Securing regulatory compliance by issuing or revoking licenses and persuading or training others to correct problems. Regardless of the methods used to attempt to obtain compliance, the position can ultimately rely on legal authority to impose sanctions and penalties. For example, positions persuade and train private companies to modify their operations in order to reduce levels of emissions or pollutants.

Advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions and behaviors. As an example, positions advise and guide local drinking water treatment plant operators on methods to maintain compliance with standards.

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories. This goes beyond what has been learned in training or repeating information that is

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available in another format. For example, positions educate the public on the purpose of reclamation efforts or the intent of federal regulations.

Negotiating as an official representative of one party in order to obtain support or cooperation where there is no formal rule or law to fall back on in requiring such action or change from the other party. Such negotiation has fiscal or programmatic impact on an agency. In reaching settlements or compromises, the position does not have a rule or regulation to enforce but is accountable for the function. As an example, positions negotiate with local landowners to settle claims or to determine fiscal responsibility for hazardous waste cleanup which impacts the state or federal government's share of costs.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a unit supervisor or senior authority. The unit supervisor is accountable, including signature authority, for actions and decisions that directly impact the pay, status, and tenure of three or more full-time equivalent positions. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

OR

The senior authority is a pacesetter who has a unique level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. It is an essential component of the work assignment that has been delegated by management to the position. This authority directly influences management decisions beyond the agency. Managers and peers seek this level of technical guidance and direction as the designer of a statewide system or in a subject area for other areas of state government. Managers and peers, both internally and externally to the agency, rely on this pacesetter when making decisions regarding the direction that policy, programs, and systems should take in the pacesetter's field of expertise. An example is an authority on computer modeling of air pollution problems where managers and peers within and outside the agency rely on its counsel in developing solutions to environmental problems.

ENVIRONMENTAL PROTECTION SPECIALIST V I3A6**

CONCEPT OF CLASS

This class describes the second-level supervisor or leading authority. In addition to work described by the lower classes in this series, positions in this level direct multiple units in carrying out the programs established by its agency. Leading authorities are required to exert direct influence beyond the state's boundaries in an environmental subject. This class differs from the Environmental Specialist IV class on the Decision Making and Line/Staff Authority factors.

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FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the interpretive level, as described here. Within limits of the strategic master plan and allocated human and fiscal resources, choices involve determining tactical plans to achieve the objectives established by the higher management (strategic) level. This involves establishing what processes will be done, developing the budget, and developing the staffing patterns and work units in order to deploy staff. For example, positions in this class determine the structure of sub-units, the manpower and budget required to meet competing demands between parts of a program, and set the work plans to meet program objectives. This level includes inventing and changing systems and guidelines that will be applied by others statewide. As an example, positions establish the permitting or regulatory processes used by units statewide. By nature, this is the first level where positions are not bound by processes and operations in their own programs as a framework for decision making and there are novel or unique situations that cause uncertainties that must be addressed at this level. As an example, positions decide how programs need to be changed to better enforce regulations established by boards or commissions. Through deliberate analysis and experience with these unique situations, the manager or expert determines the systems, guidelines, and programs for the future. For example, positions decide whether programs will have an educational component in addition to the regulatory nature of their program.

Complexity -- The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of physical science theories, environmental concepts, and principles in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. As an example, positions adapt reclamation or remediation concepts to individual site circumstances in formulating a remedial action plan. While general policy, precedent, or non-specific practices exist, they are inadequate so they are relevant only through approximation or analogy. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing guidelines so they can be applied to particular circumstances and to deal with emergencies. For example, positions may tailor existing test concepts to evaluate new alternative fuels for emission control purposes.

OR

The nature of, and need for, analysis and judgment is strategic, as described here. Positions develop guidelines to implement a program that maintains the agency's mission. Guidelines do not exist for most situations. In directive situations, positions use judgment and resourcefulness to interpret circumstances in a variety of situations and establish guidelines that direct how a departmental/agency program will be implemented. For example, such positions establish strategic operating plans for their program areas to cover multiple situations ranging from simple, localized waste cleanup projects to regional or multi-state efforts requiring interstate agreements and cooperative projects with active federal involvement.

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Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of any of the following:

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories. This goes beyond what has been learned in training or repeating information that is available in another format. For example, positions appear before county or city governing units to clarify the intent and rationale behind safety programs or disease prevention inspection programs.

Negotiating as an official representative of one party in order to obtain support or cooperation where there is no formal rule or law to fall back on in requiring such action or change from the other party. Such negotiation has fiscal or programmatic impact on an agency. In reaching settlements or compromises, the position does not have a rule or regulation to enforce but is accountable for the function. As an example, positions negotiate with other government agencies to agree on separation of cleanup or regulatory responsibilities.

Defending, arguing, or justifying an agency's position in formal hearings or court where the position is an official representative of one party. For example, positions justify their agency's program efforts to control air pollution or discharge of wastes during hearings before regulatory boards or commissions.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a manager or leading authority. The manager must be accountable for multiple units through the direct supervision of at least two subordinate Unit Supervisors; and, have signature authority for actions and decisions that directly impact pay, status, and tenure. Elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, second-level signature on performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

OR

The leading authority is a pacesetter who has a rare level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. It is an essential component of the work assignment that has been delegated by management to the position. This authority directly influences management decisions and peers in the profession outside of state government. Managers and peers beyond state government recognize and seek this level of technical guidance and direction because of the recognized expertise in a subject area. For example, program managers and colleagues in other states rely on this regional or national pacesetter when making decisions regarding the direction of their policy, programs, and systems in the pacesetter's field of expertise. This reliance on, and delegation of, primary responsibility for influencing management direction, including representing the state regionally or nationally, separates this level of staff authority from all others. An example of such authority might be the technical expert on emission control devices that manufacturers and other states' or federal scientists rely on for advice on controlling emissions.

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DEFINITIONS

Air quality specialty area: work involving the prevention or control of pollutants, contaminants, or particulate in the air from mobile or stationary emission sources in order to improve air quality.

Consumer protection specialty area: work related to the control of product and sanitation factors for the optimum health, comfort, or safety of the public in such areas as child care, food and drugs, accommodations, fraud, and product safety.

Land resources specialty area: work related to minimizing the impacts to land, soil, rocks, water, and vegetation resources by the control of pollutants or contaminants and the reclamation of these resources to a productive state.

Health physics specialty area: work related to the detection, control, and prevention of radiologic hazards to the public.

Waste management specialty area: work related to the prevention, control, or remediation of pollution or contamination related to the generation, transportation, treatment, disposal, or recycling of wastes, or mining industries whose by-products may be harmful to either human health or the environment.

Water quality specialty area: work related to preservation, control, and remediation of water pollution sources for the purpose of protecting the public and the quality of surface and ground waters.

Generalists specialty area: work of environmental protection nature not described in any of the other specialty areas.

Physical science: those sciences related to the composition, structure, or properties of physical matter or energy in such disciplines as chemistry, geology, hydrology, astronomy, meteorology, or physics.

Media: concerned with the chemical and physical form of air, water, or land resources that carry, transmit, hold, or dissipate pollutants, pathogens, or hazards to human health and the environment.

Environmental program: the formalized work of a state agency for the purposes of evaluating, regulating, controlling, mitigating, remediating or preventing pollution of air, land, or water of the state.

ENTRANCE REQUIREMENTS

Minimum entry requirements and general competencies for classes in this series are contained in the State of Colorado Department of Personnel & Administration web site.

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For purposes of the Americans with Disabilities Act, the essential functions of specific positions are identified in the position description questionnaires and job analyses.

CLASS SERIES HISTORY

Effective 7/1/02 (DLF). PSE System Maintenance Study. No changes. Published as proposed 5/15/02.

Effective 12/15/94 (DLF). Published as proposed 10/31/04.

Effective 9/1/93 (DLF). Job Evaluation System Revision project. Published as proposed 6/1/93 (DLF).

Revised 7/1/88. Changed class codes, titles, grades, nature of work, and entrance requirements, Consumer Health Protection Specialist (A5945-49).

Created 7/1/88. Supervising Consumer Health Protection Specialist (A5951).

Revised 7/1/85. Changed nature of work and entrance requirements, Health Physicist (A3420-22, 24,25).

Created 7/1/85. Senior Health Physicist (A3423).

Revised 7/1/84. Changed class codes, titles, grades and relationships, Consumer Health Protection Specialist (A5945-47).

Revised 7/1/84. Changed nature of work and entrance requirements, Air Pollution Control Specialist (A3461-65).

Created 7/1/84. Principal Air Pollution Control Specialist (A3460).

Revised 7/1/83. Changed grades and relationships, Mined Land Reclamation Specialist (A7250-52).

Revised 7/1/81. Changed nature of work and entrance requirements Supervising Health Physicist (A3425), also changed grades and relationships, Mined Land Reclamation Specialist (A7250-56).

Revised 5/1/80. Changed options and entrance requirements, Consumer Health Protection Specialist (A5945-48).

Revised 9/1/78. Changed nature of work, class codes, titles, and entrance requirements, Mined Land Reclamation Specialist (A7252,56).

Created 9/1/78. Mined Land Reclamation Specialist (A7250,51,54).

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Revised 11/1/77. Changed entrance requirements, Consumer Health Protection Specialist (A5945-48).

Revised 4/1/76. Deleted substitution, Health Physicist (A3420-22).

Revised 12/1/75. Changed entrance requirements, added C range, Health Physicist (A3420-22).

Created 1/1/75. Health Physicist (A3420-22,24,25), Air Pollution Control Specialist (A3460-65), Consumer Health Protection Specialist (A5945-49), Mined Land Reclamation Specialist (A7252,56).

SUMMARY OF FACTOR RATINGS

Class Level	Decision Making	Complexity	Purpose of Contact	Line/Staff Authority
Environmental Protect Intern	na	Na	Na	na
Environmental Protect Spec I	Operational	Patterned	Detect	Indiv. Contributor
Environmental Protect Spec II	Operational or Process	Patterned or Formulative	* Exchange, Detect, Secure, Advise, or Clarify	Indiv. Contributor
Environmental Protect Spec III	Process	Formulative	** Detect, Secure, Advise, or Clarify	Work Leader or Staff Authority
Environmental Protect Spec IV	Process	Formulative	*** Detect, Secure, Advise, Clarify, or Negotiate	Unit Supervisor or Senior Authority
Environmental Protect Spec V	Interpretive	Formulative or Strategic	Clarify, Negotiate, or Defend	Manager or Leading Authority

* Must have 2 of 5.

** Must have 3 of 4.

*** Must have 3 of 5.

ISSUING AUTHORITY: Colorado Department of Personnel & Administration



STATE OF COLORADO

CLASS SERIES DESCRIPTION

July 1, 2002

PHYSICAL SCIENCE RESEARCHER/SCIENTIST

I3B1I* TO I3B6**

Specialty Areas

A. Cartography
B. Chemistry
C. Geology
D. Hydrology

E. Industrial Hygiene
F. Meteorology
G. Other Science

DESCRIPTION OF OCCUPATIONAL WORK

This class series uses six levels in the Physical Science and Engineering occupational group and describes research or the practical application of theory, principles, and models in the physical sciences. Researchers plan and conduct research into theory in order to formulate new theory and increase the basic knowledge of a science. Scientists plan, devise, and conduct data collection or testing methods to understand a problem and its cause and to determine the means to comply with program or regulatory standards or requirements. Scientists also apply the results to recommend policies, strategies, solutions, and institutional arrangements for the planning, implementing, and evaluating of the agency's programs. Work includes designing experiments, methodologies, and techniques to detect, discover, measure, and analyze data on a previously unobserved phenomena or to replicate the findings of other research efforts; or, developing the methods and techniques to collect data, conducting surveys, studies, and tests, and analyzing and interpreting data and studies. Positions in this class write reports and prepare briefings or presentations explaining the use, analysis, and results of their work, including the applicability, efficiency, and accuracy of the methods used by other findings, the effectiveness of theory and models in practice, or the enforcement of regulations. In addition, some research positions may locate and obtain funding for their research efforts.

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PHYSICAL SCIENCE RESEARCHER/SCIENTIST
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Science Researcher/Scientist III begins on page 5, Physical Science Researcher/Scientist IV begins on page 7, and Physical Science Researcher/Scientist V begins on page 10.

PHYSICAL SCIENCE RESEARCHER/SCIENTIST INTERN I3B1I*

CONCEPT OF CLASS

This class describes the entry level. Work is designed to train positions for a higher level in the class series. Although tasks are similar to those of higher levels, assignments are structured and performed with direction and assistance from others. Positions carry out established work processes and operations by learning to apply and follow procedures, techniques, rules, and regulations. Once training has been completed, the position is to be moved to the next level. Positions should not remain in this class indefinitely.

PHYSICAL SCIENCE RESEARCHER/SCIENTIST I I3B2T*

CONCEPT OF CLASS

This class describes the first working level. Typically, positions perform portions of the research assignment or study, such as performing experiments or collecting source data and analyzing it, where the methodologies have been designed, and will be checked, by a higher level researcher/scientist. Any changes to the original research designs or study plans require prior approval from a higher level. Some positions in this class are also responsible for ordering lab supplies and maintaining lab equipment.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to carry out the process. This includes determining how the operation will be completed. For example, positions in this level determine the practical techniques or approach to collect required data, choose the software and validation techniques when devising the procedure to analyze data, and write assigned portions of reports or proposals. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established process. For example, the work focuses on applying theory and techniques to the practical aspects of the specific field or program of research. Choices are within a range of specified, acceptable standards, alternatives, and technical practices.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study scientific reports and data to determine what it means and how it fits together in order to get practical solutions in the form of a specific analysis or data collection method to use for a particular assignment. Guidelines in the form of a hypothesis and research plan, regulations and standards, experiment or study designs, protocols and techniques, software packages, and

CLASS SERIES DESCRIPTION (Cont'd.)
PHYSICAL SCIENCE RESEARCHER/SCIENTIST
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instructions exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. For example, the specific protocol used for collecting data may vary by research or study subjects and samples.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of either of the following:

Exchanging or collecting information with contacts. This involves giving learned information that is readily understandable by the recipient or collecting factual information in order to solve factual problems, errors, or complaints. For example, positions explain the purpose of the research or study and its procedure to subjects, collect data from subjects, and exchange information or data with other labs, research projects, or regulatory bodies.

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. For example, in interviewing subjects during an experiment or study, positions persuade subjects to cooperate or resolve problems with the subject's understanding by interpreting and probing for information.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may serve on a collaborative problem-solving team.

PHYSICAL SCIENCE RESEARCHER/SCIENTIST II I3B3**

CONCEPT OF CLASS

This class describes the fully-operational level. Positions in this level develop research or study plans, including formulating hypotheses, designing experiments or studies, devising and testing data collection procedures, defining suitable subjects or samples and the procedures to solicit participation, and evaluating and interpreting source data. Some positions may contribute to preparation of grant applications by writing assigned portions of a proposal. Work includes observing or interviewing subjects, conducting experiments or surveys, writing reports and conclusions on results and conclusions, and presenting results and conclusions to others. Some positions in this class may oversee the work of research assistants or technicians. This class differs from the Physical Science Researcher/Scientist I on the Decision Making and Complexity factors, and possibly on the Purpose of Contact factor.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

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PHYSICAL SCIENCE RESEARCHER/SCIENTIST
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Decision Making -- The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. For example, in developing the plan for a research project, a position determines the set of experiments and methodologies to be used in collecting and analyzing the data. As another illustration, in testing compliance or studying the applicability of a theoretical model, a position determines the set of techniques and methodologies to be used in collecting and analyzing the data. The general pattern, program, or system exists but must be individualized. For example, the field of science, research program, program and cost guidelines, and funding system exist but must be adapted for the specific research plan or study. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. For example, when testing a new theory or researching to improve a theory, the position applies accepted scientific principles and analytical techniques in designing experiments and analyzing data; or, the position applies principles and analytical techniques in designing methods to adjust and weigh raw data and evaluate its reliability. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

Complexity -- The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of theories, concepts, and principles in the particular physical science in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. For example, a position tailors theory and techniques to determine what data should be explored or collected, the methods to collect it, and how to evaluate it for the specific study or test. While general policy, precedent, or non-specific practices exist, they are inadequate so they are relevant only through approximation or analogy. For example, positions search literature for similar research in order to draw analogies that can be used in modifying methods and protocols for the specific test or research. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing guidelines so they can be applied to particular circumstances and to deal with emergencies. For example, positions interpret program policies, standards, regulations, and existing models in relation to planning the specific methods and practices for a project.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of any of the following:

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. For example, in interviewing research subjects during an experiment or study, positions persuade subjects to cooperate or resolve problems with the subject's understanding by interpreting and probing for information.

CLASS SERIES DESCRIPTION (Cont'd.)
PHYSICAL SCIENCE RESEARCHER/SCIENTIST
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Securing regulatory compliance by issuing or revoking licenses and persuading or training others to correct problems. Regardless of the methods used to attempt to obtain compliance, the position can ultimately rely on legal authority to impose sanctions and penalties. For example, regardless of methods used to persuade others to comply, a position recommends enforcement actions against violators, such as warnings, fines, or citations.

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories or marketing a product or service. This goes beyond what has been learned in training or repeating information that is available in another format. For example, positions teach courses and seminars, interpret results, or educate potential sponsors on the hypothesis and potential benefits of the research in order to obtain new funding.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

PHYSICAL SCIENCE RESEARCHER/SCIENTIST III I3B4**

CONCEPT OF CLASS

This class describes the work leader or staff authority. In addition to performing research/science as described before, positions in this level oversee the operation of a work unit with less than three full-time equivalent positions, including prioritizing work assignments and writing operating procedure manuals. Also included in this class is the position functioning as a pacesetter in a physical science which is evidenced by management's or peers' reliance on such a position for recommendations on policy and program direction that impacts the agency's mission. This class differs from the Physical Science Researcher/Scientist II on the Line/Staff Authority factor and possibly on the Purpose of Contact factor.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. For example, in testing compliance or studying the applicability of a theoretical model, a position determines the set of techniques and methodologies to be used in collecting and analyzing the data. As another example, work leaders determine operating procedures and write manuals used by others in the work unit. The general pattern, program, or system exists but must be individualized. For example, the scientific and program guidelines exist but must be adapted for the specific research

CLASS SERIES DESCRIPTION (Cont'd.)
PHYSICAL SCIENCE RESEARCHER/SCIENTIST
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plan or study. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. For example, when testing a new theory or researching to improve a theory, the position applies accepted scientific principles and analytical techniques in designing experiments and analyzing data; or, the position applies principles and analytical techniques in designing methods to adjust and weigh raw data and evaluate its reliability. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

Complexity -- The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of theories, concepts, and principles in the particular physical science in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. For example, a position tailors theory and techniques to determine what data should be explored or collected, the methods to collect it, and how to evaluate it for the specific study or test. While general policy, precedent, or non-specific practices exist, they are inadequate so they are relevant only through approximation or analogy. For example, positions search literature for similar research in order to draw analogies that can be used in modifying methods and protocols for the specific test or research. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing guidelines so they can be applied to particular circumstances and to deal with emergencies. For example, positions interpret program policies, standards, regulations, and existing models in relation to planning the specific methods and practices for a project.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of any of the following:

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. For example, in interviewing research subjects during an experiment or study, positions persuade subjects to cooperate or resolve problems with the subject's understanding by interpreting and probing for information.

Securing regulatory compliance by issuing or revoking licenses and persuading or training others to correct problems. Regardless of the methods used to attempt to obtain compliance, the position can ultimately rely on legal authority to impose sanctions and penalties. For example, regardless of methods used to persuade others to comply, a position recommends enforcement actions against violators, such as warnings, fines, or citations.

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories or marketing a product or service. This goes beyond what has been learned in training or repeating information that is available in another format. For example, positions teach courses and seminars, interpret results for others, or educate potential sponsors on the hypothesis and potential benefits of the research in order to obtain new funding.

CLASS SERIES DESCRIPTION (Cont'd.)
PHYSICAL SCIENCE RESEARCHER/SCIENTIST
July 1, 2002

Negotiating as an official representative of one party in order to obtain support or cooperation where there is no formal rule or law to fall back on in requiring such action or change from the other party. Such negotiation has fiscal or programmatic impact on an agency. In reaching settlements or compromises, the position does not have a rule or regulation to enforce but is accountable for the function. For example, as the agency's representative, positions are authorized to negotiate and approve contractual agreements with sponsors or negotiate with legislative committees to obtain funds. Such negotiations determine the type of projects and level of funding available for research.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a work leader or staff authority. The work leader is partially accountable for the work product of two or more full-time equivalent positions, including timeliness, correctness, and soundness. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. Typical elements of direct control over other positions by a work leader include assigning tasks, monitoring progress and work flow, checking the product, scheduling work, and establishing work standards. The work leader provides input into supervisory decisions made at higher levels, including signing leave requests and approving work hours. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

OR

The staff authority is a pacesetter who has a unique level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. This authority directly influences management decisions at least on an agency-wide basis. For example, management relies on such a position when making decisions regarding the direction that policy and a program or system should take in the staff authority's field of expertise. Managers and peers recognize and seek this level of technical guidance and direction for development of an agency's system or regarding the application of a statewide system within the agency or to its clients.

PHYSICAL SCIENCE RESEARCHER/SCIENTIST IV I3B5**

CONCEPT OF CLASS

This class describes the first supervisory level or senior authority. In addition to performing work as described before, positions in this level are accountable for the work of at least three full-time equivalent positions, including decisions affecting pay, status, or tenure. Also included in this class is the position functioning as a pacesetter in a physical science which is evidenced by management's or peers' reliance on such a position for recommendations on policy and program direction where the programs have impact beyond the agency's boundaries, including those programs under the control or influence of an agency that are administered by local governments. This class differs from the Physical Science Researcher/Scientist III on the Line/Staff Authority factor and possibly on the Complexity and Purpose of Contact factors.

CLASS SERIES DESCRIPTION (Cont'd.)
PHYSICAL SCIENCE RESEARCHER/SCIENTIST
July 1, 2002

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. For example, in testing compliance or studying the applicability of a theoretical model, a position determines the set of techniques and methodologies to be used in collecting and analyzing the data. As another example, supervisors determine operating procedures and write manuals used by others in the work unit. The general pattern, program, or system exists but must be individualized. For example, the scientific and program guidelines exist but must be adapted for the specific research plan or study. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. For example, when testing a new theory or researching to improve a theory, the position applies accepted scientific principles and analytical techniques in designing experiments and analyzing data; or, the position applies principles and analytical techniques in designing methods to adjust and weigh raw data and evaluate its reliability. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

Complexity -- The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of theories, concepts, and principles in the particular physical science in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. For example, a position tailors theory and techniques to determine what data should be collected, the methods to develop it, and how to evaluate and use it for the specific study or project. While general policy, precedent, or non-specific practices exist, they are inadequate so they are relevant only through approximation or analogy. For example, positions search literature for similar research in order to draw analogies that can be used in modifying methods and protocols for a specific test or research. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing guidelines so they can be applied to particular circumstances and to deal with emergencies. For example, positions interpret program policies, standards, and existing models in relation to planning the specific methods and practices for a project.

OR

The nature of, and need for, analysis and judgment is unprecedented, as described here. Positions originate models, concepts, and theories that are new to the professional field **AND** where no prototype exists in state government. For example, a position develops the models and measurements, that will be applied by other researchers and scientists in the field of science. At the leading edge, guidelines do not exist so judgment and resourcefulness are needed to develop

CLASS SERIES DESCRIPTION (Cont'd.)
PHYSICAL SCIENCE RESEARCHER/SCIENTIST
July 1, 2002

them. For example, a position is conducting research designed to discover theory or law new to the state's programs and the science itself.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of any of the following:

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. For example, in interviewing research subjects during an experiment or study, positions persuade subjects to cooperate or resolve problems with the subject's understanding by interpreting and probing for information.

Securing regulatory compliance by issuing or revoking licenses and persuading or training others to correct problems. Regardless of the methods used to attempt to obtain compliance, the position can ultimately rely on legal authority to impose sanctions and penalties. For example, regardless of methods used to persuade others to comply, a position recommends enforcement actions against violators, such as warnings, fines, or citations.

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories or marketing a product or service. This goes beyond what has been learned in training or repeating information that is available in another format. For example, positions teach courses and seminars, interpret research results, or educate potential sponsors on the hypothesis and potential benefits of the research in order to obtain new funding.

Negotiating as an official representative of one party in order to obtain support or cooperation where there is no formal rule or law to fall back on in requiring such action or change from the other party. Such negotiation has fiscal or programmatic impact on an agency. In reaching settlements or compromises, the position does not have a rule or regulation to enforce but is accountable for the function. For example, as the agency's representative, positions are authorized to negotiate and approve contractual agreements with sponsors or negotiate with sponsors or legislative committees to obtain funds. Such negotiations determine the type of projects and level of funding available for research.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a unit supervisor or senior authority. The unit supervisor is accountable, including signature authority, for actions and decisions that directly impact the pay, status, and tenure of three or more full-time equivalent positions. At least one of the subordinate positions must be in this class series or the at a comparable conceptual level. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

OR

CLASS SERIES DESCRIPTION (Cont'd.)
PHYSICAL SCIENCE RESEARCHER/SCIENTIST
July 1, 2002

The senior authority is a pacesetter who has a unique level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. This authority directly influences management decisions beyond the agency. Managers and peers seek this level of technical guidance and direction as the designer of a statewide system or in a subject area for other areas of state government. Managers and peers, both internally and externally to the agency, rely on this pacesetter when making decisions regarding the direction policy, programs, and systems should take in the pacesetter's field of expertise.

PHYSICAL SCIENCE RESEARCHER/SCIENTIST V I3B6**

CONCEPT OF CLASS

This class describes the manager of an agency's research or science program, who may also be a leading authority, or senior authority. In managing a program, positions in this level develop the goals and objectives of the program, allocate funds and staff among the various projects, evaluate the success of studies or projects, prioritize and approve study or testing proposals, and authorize expenditures. Also included in this class is the position functioning as a pacesetter in a physical science which is evidenced by management's or peers' reliance on such a position for recommendations on policy and program direction where the programs have impact beyond the agency's boundaries, including those programs under the control or influence of an agency that are administered by local governments. A position may also be a leading authority who functions as a pacesetter on a regional or national level. This class differs from the Physical Science Researcher/Scientist IV on the Decision Making factor and possibly the other factors.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the interpretive level, as described here. Within limits of the strategic master plan and allocated human and fiscal resources, choices involve determining tactical plans to achieve the objectives established by the higher management (strategic) level. This involves establishing what processes will be done, developing the budget, and developing the staffing patterns and work units in order to deploy staff. For example, a position develops the multi-year study agenda for the program, develops the budget request for the program and approves expenditures, approves project plans and project priorities, and assigns allocated resources among the various projects. This level includes inventing and changing systems and guidelines that will be applied by others statewide. By nature, this is the first level where positions are not bound by processes and operations in their own programs as a framework for decision making and there are novel or unique situations that cause uncertainties that must be addressed at this level. Through deliberate analysis and experience with these unique situations, the manager or expert determines the systems, guidelines, and programs for the future. For example, in determining program goals and multi-year agendas, positions determine the focus or services of the program for the future.

CLASS SERIES DESCRIPTION (Cont'd.)
PHYSICAL SCIENCE RESEARCHER/SCIENTIST
July 1, 2002

Complexity -- The nature of, and need for, analysis and judgment is strategic, as described here. Positions develop guidelines to implement a program that maintains the agency's mission. For example, positions develop fiscal and staffing management plans, operational policies, program goals and agendas, and project evaluation standards needed to operate an agency's research/science program. Guidelines do not exist for most situations. For example, the only parameters are program policy and mission, regulatory standards or potential sponsors, and allocated resources. In directive situations, positions use judgment and resourcefulness to interpret circumstances in a variety of situations and establish guidelines that direct how a departmental/agency program will be implemented. For example, positions develop operational policies for the agency's work in a specific science, such as policies on informed consent, confidentiality, and sharing of data.

OR

The nature of, and the need for, analysis and judgment is unprecedented, as described here. Positions originate models, concepts, and theories that are new to the professional field **AND** where no prototype exists in state government. For example, a position develops the models and measurements, that will be applied by other researchers and scientists in the field of science. At the leading edge, guidelines do not exist so judgment and resourcefulness are needed to develop them. For example, a position is conducting research designed to discover theory or law new to the state's programs and the science itself.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of any of the following:

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories or marketing a product or service. This goes beyond what has been learned in training or repeating information that is available in another format. For example, positions teach courses and seminars, interpret research results, or educate potential sponsors on the hypothesis and potential benefits of the research in order to obtain new funding.

Negotiating as an official representative of one party in order to obtain support or cooperation where there is no formal rule or law to fall back on in requiring such action or change from the other party. Such negotiation has fiscal or programmatic impact on an agency. In reaching settlements or compromises, the position does not have a rule or regulation to enforce but is accountable for the function. For example, as the agency's representative, positions are authorized to negotiate and approve contractual agreements with sponsors or negotiate with sponsors or legislative committees to obtain funds. Such negotiations determine the type of projects and level of funding available for research.

Defending, arguing, or justifying an agency's position in formal hearings or court where the position is an official representative of one party. For example, on behalf of an agency, a position defends or justifies the purpose and results of research during regulatory board or commission hearings or legislative hearings in order to influence these decision makers to adopt or change policies and programs in favor of the study results.

CLASS SERIES DESCRIPTION (Cont'd.)
PHYSICAL SCIENCE RESEARCHER/SCIENTIST
July 1, 2002

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a program supervisor (unit supervisor), manager, senior authority, or leading authority. The program supervisor is accountable, including signature authority, for actions and decisions that directly impact the pay, status, and tenure of three or more full-time equivalent positions. At least one of the subordinate positions must be in this class series or at a comparable conceptual level. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

OR

The manager must be accountable for multiple units through the direct supervision of at least two subordinate Unit Supervisors; and, have signature authority for actions and decisions that directly impact pay, status, and tenure. Elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, second-level signature on performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

OR

The senior authority is a pacesetter who has a unique level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. This authority directly influences management decisions beyond the agency. Managers and peers seek this level of technical guidance and direction as the designer of a statewide system or in a subject area for other areas of state government. Managers and peers, both internally and externally to the agency, rely on this pacesetter when making decisions regarding the direction policy, programs, and systems should take in the pacesetter's field of expertise.

OR

The leading authority is a pacesetter who has a rare level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. This authority directly influences management decisions and peers in the profession outside of state government. Managers and peers throughout the nation recognize and seek this level of technical guidance and direction because of the recognized expertise in a subject area. For example, program managers and colleagues in other states rely on the regional or national pacesetter when making decisions regarding the direction of their policy, programs, and systems in the pacesetter's field. This reliance on, and delegation of, primary responsibility for influencing management direction, including representing the state regionally or nationally, separates this level of staff authority from all others.

CLASS SERIES DESCRIPTION (Cont'd.)
PHYSICAL SCIENCE RESEARCHER/SCIENTIST
July 1, 2002

DEFINITIONS

Cartography: the application of mapping, surveying, and photogrammetry fields to studies or analyses of other scientific or program data such as economic, demographic, or statistical data.

Chemistry & Related: the scientific application of the theories, principles, or models of the physical and chemical properties and compositional changes of substances; specialization may occur in one or more branches such as organic, inorganic, or bio-chemistry. This specialty may include work related to biological chemistry of identifying and the analytical testing of substances, cells, tissues, allergens, antibodies, or compounds related to living organisms.

Geology: the application of knowledge of chemistry, physics, biology, and mathematics to explain phenomenon related to the composition, structure, or history of the earth's crust in support of mining, exploration, construction, or environmental impact. Geology is the science which treats of the earth, the rocks of which it is composed, and the changes which it has undergone or is undergoing.

Hydrology: the application of the theories, principles, and models of water resource engineering, hydraulics, and hydrology with state and federal laws or state water rights, policies and programs. This specialty area includes work assignments related to the planning, developing, implementation, administration and evaluation of the economic, legal, political and environmental aspects of water supply, usage, control and/or protection.

Industrial Hygiene: the application of chemistry, biology, or occupational health sciences to recognize, analyze, eliminate, or control health hazards or diseases associated with dust, gases, radiation, noises, or toxic materials or substances.

Meteorology: the application of the knowledge of climatology and atmospheric phenomena to providing public services in this area.

Other science: any other physical science not defined by one of the specialty areas above.

Physical Science: those sciences related to physical, non-living matter or energy, such as chemistry, physics, geology, meteorology, astronomy, and mathematics.

ENTRANCE REQUIREMENTS

Minimum entry requirements and general competencies for classes in this series are contained in the State of Colorado Department of Personnel & Administration web site.

For purposes of the Americans with Disabilities Act, the essential functions of specific positions are identified in the position description questionnaires and job analyses.

CLASS SERIES DESCRIPTION (Cont'd.)
PHYSICAL SCIENCE RESEARCHER/SCIENTIST
July 1, 2002

CLASS SERIES HISTORY

Effective 7/1/02 (DLF). PSE System Maintenance Study. Definition of Hydrology changed. Published as proposed 5/15/02.

Effective 9/1/93 (DLF). Job Evaluation System Revision project. Published as proposed 5/28/93.

Revised 1/1/92. Changed Occupational Group to PSE, Principal Water Resource Specialist (A3156).

Revised 10/1/86. Changed nature of work, Supervisor, Genetic Screening Lab (A5548); changed class codes and entrance requirements, Microbiologist (A5543-54).

Revised 7/1/85. Changed class codes, options, nature of work, and entrance requirements, Chemist A -Chief Chemist (A5901-05).

Revised 7/1/83. Changed pay grades and relationship, Geologist B/C (A3502-03).

Revised 7/1/81. Changed relationship, Principal Water Resource Specialist (A3156).

Created 7/1/80. Cartographer A - Senior (A0040-43), Supervisor, Genetic Screening Lab (A5548), Senior Chemist (A5906).

Revised 1/1/79. Changed nature of work and entrance requirements, Senior Geologist (A3504).

Created 10/1/78. Senior Microbiologist (A5554).

Created 1/1/75. Water Resource Specialist A - Principal Water Resource Specialist (A3150-56), Industrial Hygienist A - Supv Industrial Hygienist (A3414-19), Geologist A - Supervising Geologist (A3501-06), Microbiologist A-C, Supervising, Chief (A5543-47, 49, 50), Public Health Lab Licensing Specialist (A5551), Chemist A - Chief Chemist (A5901-05).

CLASS SERIES DESCRIPTION (Cont'd.)
PHYSICAL SCIENCE RESEARCHER/SCIENTIST
July 1, 2002

SUMMARY OF FACTOR RATINGS

Class Level	Decision Making	Complexity	Purpose of Contact	Line/Staff Authority
Physical Science Res/Sci Intern	na	na	na	na
Physical Science Res/Sci I	Operational	Patterned	Exchange or Detect	Indiv. Contributor
Physical Science Res/Sci II	Process	Formulative	Detect, Secure, or Clarify	Indiv. Contributor
Physical Science Res/Sci III	Process	Formulative	Detect, Secure, Clarify, or Negotiate	Work Leader or Staff Authority
Physical Science Res/Sci IV	Process	Formulative or Unprecedented	Detect, Secure, Clarify, or Negotiate	Unit Supervisor or Senior Authority
Physical Science Res/Sci V	Interpretive	Strategic or Unprecedented	Clarify, Negotiate, or Defend	Unit Supervisor, Manager, Senior Authority, or Leading Authority

ISSUING AUTHORITY: Colorado Department of Personnel & Administration



STATE OF COLORADO

CLASS SERIES DESCRIPTION

July 1, 2002

AIR ENVIRONMENTAL SYSTEMS TECHNICIAN

I5A1TX TO I5A2XX

DESCRIPTION OF OCCUPATIONAL WORK

This class series uses two levels in the Physical Science and Engineering occupational group and describes technical electronic and automotive testing, calibration, inspection, certification, and training services for air emissions planning and control. The work consists of supporting testing or field operations of automotive emissions control plans, devices, or training and education programs. Work in emissions testing entails the planning, conduct, analysis, and reporting on mass emissions tests of automotive electronic equipment designed to control or monitor auto emissions in the atmosphere. The work in field operations includes responsibility for performing technical evaluations of vehicles or fleets and inspecting emission-producing facilities for compliance with emission control rules and regulations. The work entails providing information to the public on emissions programs and training for certification of inspectors of emission control test facilities. The Emissions Compliance Inspector differs from this series as that series describes inspection of vehicle testing stations for compliance with regulations.

INDEX: Air Environmental Systems Technician I begins on this page and Air Environmental Systems Technician II begins on page 3.

AIR ENVIRONMENTAL SYSTEMS TECHNICIAN I I5A1TX

CONCEPT OF CLASS

This class describes the fully-operational level. Positions in this level conduct inspections of automotive fleet self-certification programs, gasoline distribution facilities, and individual vehicles under the testing complaint resolution program. Positions use electronic test equipment and specifications to inspect and calibrate emission test equipment through the use of scanners, meters, computers, analyzers, and dynamometers. Positions use their knowledge of computerized engine management systems to advise the public and manufacturers on the state's

CLASS SERIES DESCRIPTION (Cont'd.)
AIR ENVIRONMENTAL SYSTEMS TECHNICIAN
July 1, 2002

emission requirements. Some positions participate in testing of new emissions devices or monitoring systems for planning air quality programs or assisting manufacturers in meeting new air quality standards. The positions also provide education and training on emissions programs through literature and courses. This level includes those positions receiving orientation and training to the agency setting where performance is expected to reach the fully-operational level within the initial probationary period.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to carry out the process. This includes determining how the operation will be completed. For example, positions decide what corrections are needed to bring emissions equipment into compliance with regulations. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices. For example, positions decide when proposed engine management devices will comply with future emission control standards.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study technical automotive emissions information to determine what it means and how it fits together in order to get practical solutions in the form of test results. Guidelines in the form of technical manuals, specifications, and air quality regulations exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. For example, positions analyze emission data to select the best control devices to recommend to the public.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of either of the following:

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. For example, field positions detect emission violations when inspecting facilities.

Securing regulatory compliance by issuing or revoking licenses and persuading or training others to correct problems. Regardless of the methods used to attempt to obtain compliance, the position can ultimately rely on legal authority to impose sanctions and penalties. For example, when vehicles or fleets are found to be out of compliance, positions may impose sanctions against repeated violations.

CLASS SERIES DESCRIPTION (Cont'd.)
AIR ENVIRONMENTAL SYSTEMS TECHNICIAN
July 1, 2002

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

AIR ENVIRONMENTAL SYSTEMS TECHNICIAN II I5A2XX

CONCEPT OF CLASS

This class describes the supervisory or senior authority level. In addition to work described in the previous class, positions in this level have administrative oversight for units which includes some responsibility for allocated budgets, equipment maintenance, facility management, and, for decisions which affect the pay, status, or tenure of others. This class also describes those unique positions functioning as senior authorities in their field of expertise. Managers and peers rely on such positions for advice on emission specifications or air quality programs. This class differs from the Air Environmental Systems Technician I in the Line/Staff Authority factor and possibly on the Decision Making and Purpose of Contact factors.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to carry out the process. This includes determining how the operation will be completed. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices. For example, positions choose the best technical operating performance levels to use when evaluating emission control devices.

OR

The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. The general pattern, program, or system exists but must be individualized. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. New processes or objectives require approval of higher management or the agency with authority and accountability for the

CLASS SERIES DESCRIPTION (Cont'd.)
AIR ENVIRONMENTAL SYSTEMS TECHNICIAN
July 1, 2002

program or system. For example, when designing operations tests of new emission control devices, positions analyze environmental operating parameters and decide the appropriate test methodologies and measurement standards under which to perform the test.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study air quality program and test report information to determine what it means and how it fits together in order to get practical solutions in the form of unit operations and air quality equipment or program evaluations. Guidelines in the form of regulations, equipment specifications, and technical directives exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. For example, positions choose the appropriate emission standards to apply to mixed-type, manufacturing facilities.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of at least two of the following:

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. For example, positions examine operating conditions to detect reasons for equipment failures which violate emission standards.

Advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions and behaviors. For example, positions advise emission control device manufacturers on equipment susceptibility to failure or reliability.

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories or marketing a product or service. This goes beyond what has been learned in training or repeating information that is available in another format. For example, positions train others on licensing requirements for emission testing equipment operators.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a unit supervisor or senior authority. The unit supervisor is accountable, including signature authority, for actions and decisions that directly impact the pay, status, and tenure of three or more full-time equivalent positions. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

OR

CLASS SERIES DESCRIPTION (Cont'd.)
AIR ENVIRONMENTAL SYSTEMS TECHNICIAN
July 1, 2002

The senior authority is a pacesetter who has a unique level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. It is an essential component of the work assignment that has been delegated by management to the position. This authority directly influences management decisions beyond the agency. Managers and peers seek this level of technical guidance and direction as the designer of a statewide system or in a subject area for other areas of state government. Managers and peers, both internally and externally to the agency, rely on this pacesetter when making decisions regarding the direction that policy, programs, and systems should take in the pacesetter's field of expertise.

ENTRANCE REQUIREMENTS

Minimum entry requirements and general competencies for classes in this series are contained in the State of Colorado Department of Personnel & Administration web site.

For purposes of the Americans with Disabilities Act, the essential functions of specific positions are identified in the position description questionnaires and job analyses.

CLASS SERIES HISTORY

Effective 7/1/02 (DLF). PSE System Maintenance Study. No changes. Published as proposed 5/15/02.

Effective 7/1/00 (DLF). Emission Compliance Inspector (D4H1-2) consolidated as part of the LTC consolidation study. Draft published 3/31/99, proposed 5/24/99, and final 7/1/99.

Effective 9/1/93 (DLF). Job Evaluation System Revision project. Published as proposed 6/1/93.

Revised 7/1/86. Changed relationships (A2540-42).

Created 7/1/83. Automotive Environmental Systems Technician (A2540-42).

SUMMARY OF FACTOR RATINGS

Class Level	Decision Making	Complexity	Purpose of Contact	Line/Staff Authority
Air Environ Systems Tech I	Operational	Patterned	Detect or Secure	Indiv. Contributor
Air Environ Systems Tech II	Operational or Process	Patterned	* Detect, Advise, or Clarify	Unit Supervisor or Senior Authority

* Must have 2 of 3.

ISSUING AUTHORITY: Colorado Department of Personnel & Administration



STATE OF COLORADO

CLASS SERIES DESCRIPTION

July 1, 2002

CIVIL ENGINEERING PROJECT MANAGEMENT

I5C1** TO I5C2**

Specialty Areas

A. Construction B. Pre-construction C. Other

DESCRIPTION OF OCCUPATIONAL WORK

This class series uses two levels in the Physical Sciences and Engineering occupational group and describes civil engineering project management work in the design and/or construction of buildings, highways, bridges, tunnels, dams, utilities, or other structures. The work involves planning, directing, controlling, coordinating, or evaluating all aspects of approved and budgeted projects. The work includes the management of the project team or oversight of all related contractors, sub-contractors, or consultants. The work may also include the budgetary and contract compliance responsibilities as the "designee" for the agency.

Some work in this class meets the definition of "the practice of engineering", but does not require a Professional Engineer's (P.E.) license as all engineering work is directly supervised by a licensed, registered Professional Engineer. This meets the requirement of CRS 12-25-102 et. seq., and supporting board rules. These classes are distinguished from the Professional Engineer classes which require licensing with its attendant liability and may include stamping (seal) or approving engineering designs, plans, orders, or other engineering documents. This class series is distinguished from the Construction Inspector and Engineering/Physical Science Technician classes as those classes do not describe oversight and administration of complete engineering projects.

INDEX: Civil Engineering Project Manager I begins on page 2 and Civil Engineering Project Manager II begins on page 4.

CLASS SERIES DESCRIPTION (Cont'd.)
CIVIL ENGINEERING PROJECT MANAGER
July 1, 2002

CIVIL ENGINEERING PROJECT MANAGER I

I5C1**

CONCEPT OF CLASS

This class describes the operational project manager. Positions in this level oversee all aspects of civil engineering projects within one of the project phases, i.e., pre-construction or construction. Positions review the requirements, needs, and limitations for the project, and then plan the processes needed to accomplish the project management, in terms of human, fiscal, material, and equipment or facility resources. Positions prepare and/or review preliminary plans, estimates, surveys, collected data, existing contracts, and previous engineering documents. Positions plan subordinates' work assignments, schedules, and reporting requirements. They then oversee or plan the programming or distribution of funds and the manpower and equipment needs for completion of the project. This class also describes positions functioning as assistant project managers on larger projects and as full project manager on smaller, less complex projects.

During engineering project activities, positions monitor time lines and fund expenditures to control both within the project master schedule. The position directs the review and resolution of issues, problems, or delays. Through periodic assessments and reports, project managers keep their supervisors and managers apprised of progress and problems. The project manager is the focal point for resolving all changes or deviations by contractors/consultants from plans, schedules, programs, contracts, criteria, specifications, etc. The project manager reviews, and approves for payment, verifications of contractor or consultant-provided services and materials. Positions review and validate all reports, logs, and forms related to project activities.

Prior to project completion, positions review all plans, forms, ledgers, and reports to confirm that all project items are complete. Projects are then presented for approval, and either released for bid or submitted for final pay-out and acceptance.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level, as described here. Within limits set by professional civil engineering standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. For example, positions decide the processes of managing projects from initiation to bid or close-out in terms of schedules, phase points, sequences, resources needed, change authorizations, etc. The general pattern, program, or system exists but must be individualized. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. For example, in conjunction with agency project guidelines, positions examine design problems and decide which design principles will solve these problems. New processes or objectives

CLASS SERIES DESCRIPTION (Cont'd.)
CIVIL ENGINEERING PROJECT MANAGER
July 1, 2002

require approval of higher management or the agency with authority and accountability for the program or system.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study project engineering information, requests, reports, or change orders to determine what it means and how it fits together in order to get practical solutions in the form of completed design or construction work. Guidelines in the form of standards, specifications, procedures, etc., exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. For example, positions select engineering specifications for changing construction methods when unpredicted foundation problems occur, or may need to re-write specifications due to design changes.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of clarifying underlying rationale, intent, and motive by educating others on unfamiliar design or construction concepts and theories. This goes beyond what has been learned in training or repeating information that is available in another format. As an example, positions explain the intent and rationale behind construction project plans or designs to contractor or consultant personnel.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a work leader. The work leader is partially accountable for the work product of two or more full-time equivalent positions, including timeliness, correctness, and soundness. (Note: Two FTE of "project-recurring" positions may be substituted for one of the two FTE required.) At least one of the subordinate positions must be in the Engineering or Physical Science Assistant or Technician classes or in a class at a comparable conceptual level. Typical elements of direct control over other positions by a work leader include assigning tasks, monitoring progress and work flow, checking the product, scheduling work, and establishing work standards. The work leader provides input into supervisory decisions made at higher levels, including signing leave requests and approving work hours. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

OR

Positions which do not meet the supervisory requirements in the above paragraph, may be placed in this class if they meet the concept and factors for this class, provided, the Complexity factor is evaluated at the Formulative level.

CLASS SERIES DESCRIPTION (Cont'd.)
CIVIL ENGINEERING PROJECT MANAGER
July 1, 2002

CIVIL ENGINEERING PROJECT MANAGER II

I5C2**

CONCEPT OF CLASS

This class describes the full project manager as a unit supervisor. Positions in this level oversee all aspects of civil engineering projects within one of the project phases, i.e., pre-construction or construction, or sometimes both phases. In addition to the work described by the Project Manager I class, positions in this class have responsibility for decisions which impact the pay, status, or tenure of subordinates. This class also describes positions which are full-time project managers and have a tradeoff for lower levels of supervisory responsibility but with a higher level of Complexity (refer the section under Line/Staff Authority for the use of this class under these circumstances). The tradeoff feature in this class is not used for positions functioning primarily as assistant project managers. This class differs from the Civil Engineering Project Manager I class in Line/Staff Authority factor and may also differ in the Complexity factor.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level, as described here. Within limits set by professional civil engineering standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. For example, positions decide the processes of managing projects from initiation to bid or close-out in terms of schedules, phase points, sequences, resources needed, change authorizations, etc. The general pattern, program, or system exists but must be individualized. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. For example, in conjunction with agency project guidelines, positions examine design problems and decide which design principles will solve these problems. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study project engineering information, requests, reports, or change orders to determine what it means and how it fits together in order to get practical solutions in the form of completed design or construction work. Guidelines in the form of standards, specifications, procedures, etc., exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. For example, positions select engineering specifications for changing construction methods when

CLASS SERIES DESCRIPTION (Cont'd.)
CIVIL ENGINEERING PROJECT MANAGER
July 1, 2002

unpredicted foundation problems occur, or may need to re-write specifications due to design changes.

OR

The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of engineering or construction management theories, concepts, and principles in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. While general policy, precedent, or non-specific practices exist, they are inadequate so they are relevant only through approximation or analogy. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing guidelines so they can be applied to particular circumstances and to deal with emergencies. For example, positions adapt design principles to fit unique terrain or geologic formations to complete project plans.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of clarifying underlying rationale, intent, and motive by educating others on unfamiliar design or construction concepts and theories. This goes beyond what has been learned in training or repeating information that is available in another format. As an example, positions explain the intent and rationale behind construction project plans or designs to contractor or consultant personnel.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a unit supervisor. The unit supervisor is accountable, including signature authority, for actions and decisions that directly impact the pay, status, and tenure of three or more full-time equivalent positions. (Note: Two or more FTE of "project-recurring" positions may be substituted for one of the three FTE.) Positions supervised must be in the Engineering or Physical Science Assistant or Technician classes; or in a class at a comparable conceptual level. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

OR

Positions which do not meet the supervisory requirements in the above paragraph, may be placed in this class if they meet the concept and factors for this class, provided, the Complexity factor is evaluated at the Formulative level.

DEFINITIONS

Construction: That part of an engineering project following bid award through project completion and final pay-out.

CLASS SERIES DESCRIPTION (Cont'd.)
CIVIL ENGINEERING PROJECT MANAGER
July 1, 2002

Pre-construction: That part of an engineering project from formal approval through planning and design up to and including, bid award.

Other: A combination of the above parts of an engineering project; or project parts as defined and approved by the Department of Personnel & Administration Total Compensation and Systems unit.

Designated Project: As it applies to the Department of Transportation, it is a segment of work that has been budgeted and approved as a project by the Transportation Commission and is included in the agency 5-year plan. Other agencies may have other means of formally designating projects.

ENTRANCE REQUIREMENTS

Minimum entry requirements and general competencies for classes in this series are contained in the State of Colorado Department of Personnel & Administration web site.

For purposes of the Americans with Disabilities Act, the essential functions of specific positions are identified in the position description questionnaires and job analyses.

CLASS SERIES HISTORY

Effective 7/1/02 (DLF). PSE System Maintenance Study. No changes. Published as proposed 5/15/02.

Effective 11/1/94 (DLF). Published as proposed 9/15/94.

Effective 9/1/93 (DLF). Job Evaluation System Revision project. Published as proposed 6/11/93 .

SUMMARY OF FACTOR RATINGS

Class Level	Decision Making	Complexity	Purpose of Contact	Line/Staff Authority
C. E. Project Manager I	Process	Patterned	Clarify	Work Leader *
C. E. Project Manager II	Process	Patterned or Formulative	Clarify	Unit Supervisor *

* Note: Tradeoff exists; see factor definition for guidance.

ISSUING AUTHORITY: Colorado Department of Personnel & Administration



STATE OF COLORADO

CLASS SERIES DESCRIPTION

July 1, 2002

ENGINEERING/PHYSICAL SCIENCE TECHNICIAN

I5D1** TO I5D3**

Specialty Areas

A. Engineering

B. Physical Sciences

DESCRIPTION OF OCCUPATIONAL WORK

This class series uses three levels in the Physical Sciences and Engineering occupational group and describes work in the practical application of the methods, techniques, practices, and principles of engineering or the physical sciences. This class describes work related to agency's engineering or physical sciences fields or programs and may include such things as testing, inspecting, construction planning and oversight, drafting or designing, or waste or water management. The work may also include regulatory compliance activities such as inspecting, permitting, or reporting on hazardous materials or other programs related to engineering or a physical science.

This class series differs from the Engineering/Physical Science Assistant series as those classes describe work of a physical or manual labor nature compared to this series work, which describes work more intellectual or analytical in nature related to the principles or practices of engineering or a physical science. This class differs from the Laboratory Coordinator in the physical sciences group as that class describes work typically conducted in a laboratory environment in support of education or research projects or programs. This class series differs from the Civil Engineering Project Management class series as that class describes work in administering and overseeing pre-construction and construction projects on a continuing, long-term basis.

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CLASS SERIES DESCRIPTION (Cont'd.)
ENGINEERING/PHYSICAL SCIENCE TECHNICIAN
July 1, 2002

ENGINEERING/PHYSICAL SCIENCES TECHNICIAN I I5D1**

CONCEPT OF CLASS

This class describes the first-level technician. Positions in this level provide basic support to engineers or scientists by following standard, pre-established procedures, tests, or formulas. The work includes running standard tests, measurements, or quantitative analyses on samples; operating equipment or instruments as instructed; recording and comparing results with established standards or specifications; collecting field data or samples; and recording information on tests, samples, or activities. Positions also maintain equipment and supplies and may initiate orders to replenish such. Although this is a non-supervisory class, some positions may give work direction or check the work of other positions.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the defined level, as described here. Within limits prescribed by the operation, choices involve selecting alternatives that affect the manner and speed with which tasks are carried out. These choices do not affect the standards or results of the operation

itself because there is typically only one correct way to carry out the operation. These alternatives include independent choice of such things as priority and personal preference for organizing and processing the work, proper tools or equipment, speed, and appropriate steps in the operation to apply. By nature, the data needed to make decisions can be numerous but are clear and understandable so logic is needed to apply the prescribed alternative. Positions can be taught what to do to carry out assignments and any deviation in the manner in which the work is performed does not change the end result of the operation. For example, positions operate surveying equipment in accordance with established steps and procedures of the agency or at the direction of the survey party chief.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study design, test, or construction information to determine what it means and how it fits together in order to get practical solutions in the form of data and information for reports. Guidelines in the form of standards, procedures, drawings, specifications, or manuals exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. For example, in inspecting mines, positions select the appropriate category of safety regulation to identify corrective actions needed.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of any of the following:

CLASS SERIES DESCRIPTION (Cont'd.)
ENGINEERING/PHYSICAL SCIENCE TECHNICIAN
July 1, 2002

Exchanging or collecting information with contacts. This involves giving learned information that is readily understandable by the recipient or collecting factual information in order to solve factual problems, errors, or complaints. For example, positions obtain data on test results from those persons gathering the data on-site.

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. For example, positions interview landowners to determine property boundaries or access requirements.

Securing regulatory compliance by issuing or revoking licenses and persuading or training others to correct problems. Regardless of the methods used to attempt to obtain compliance, the position can ultimately rely on legal authority to impose sanctions and penalties. For example, positions inspect mines or wells for compliance with agency regulations.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team.

ENGINEERING/PHYSICAL SCIENCES TECHNICIAN II I5D2**

CONCEPT OF CLASS

This class describes the second-level technician. In addition to work described by the Technician I class, positions in this level have responsibility for decisions on the operations needed to complete the work. Positions decide how and what work is accomplished in an engineering or physical sciences work area. This class differs from the Engineering/Physical Sciences Technician I class in the Decision Making factor and possibly in the Purpose of Contact factor.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to carry out the process. This includes determining how the operation will be completed. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices. For example, positions decide how individual bridge inspections will be completed and which types of tests to run based on measurements and visual inspections.

CLASS SERIES DESCRIPTION (Cont'd.)
ENGINEERING/PHYSICAL SCIENCE TECHNICIAN
July 1, 2002

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions review design, study, or plan information to determine what it means and how it fits together in order to get practical solutions in the form of validation or verification of compliance. Guidelines in the form of rules, standards, contracts, regulations, or specifications exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. For example, positions choose the appropriate amounts, sequences, and methods of water releases based on measurements obtained.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of either of the following:

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. For example, positions interview landowners to determine property boundaries or access requirements.

Securing regulatory compliance by issuing or revoking licenses and persuading or training others to correct problems. Regardless of the methods used to attempt to obtain compliance, the position can ultimately rely on legal authority to impose sanctions and penalties. For example, positions inspect mines, wells, or water diversions/dams for compliance with agency regulations or decrees.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor or as a work leader. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team.

OR

The work leader is partially accountable for the work product of two or more full-time equivalent positions, including timeliness, correctness, and soundness. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. Typical elements of direct control over other positions by a work leader include assigning tasks, monitoring progress and work flow, checking the product, scheduling work, and establishing work standards. The work leader provides input into supervisory decisions made at higher levels, including signing leave requests and approving work hours. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

CLASS SERIES DESCRIPTION (Cont'd.)
ENGINEERING/PHYSICAL SCIENCE TECHNICIAN
July 1, 2002

ENGINEERING/PHYSICAL SCIENCES TECHNICIAN III I5D3**

CONCEPT OF CLASS

This class describes the first-level supervisor or staff authority. In addition to work described in previous levels, positions in this level have responsibility for decisions that affect the pay, status, or tenure of others. This class differs from the Engineering/Physical Sciences Technician II class in Line/Staff Authority factor and possibly in the Decision Making or Purpose of Contact factors.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to carry out the process. This includes determining how the operation will be completed. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices. For example, positions decide how to monitor cleanup actions at hazardous waste sites.

OR

The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. For example, positions set the process for determining and adjusting water releases during changing availabilities and amount of "calls". The general pattern, program, or system exists but must be individualized. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. For example, positions apply scientific test concepts to evaluating data collected by air sampling equipment. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study engineering or scientific data and information to determine what it means and how it fits together in order to get practical solutions in the form of reports, test data, or work processes. Guidelines in the form of contracts, rules, standards, regulations, or program guides exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. For

CLASS SERIES DESCRIPTION (Cont'd.)
ENGINEERING/PHYSICAL SCIENCE TECHNICIAN
July 1, 2002

example, positions select the appropriate design standards and specifications to use in designing remodeling projects for buildings and facilities.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of at least two of the following:

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. For example, positions probe for information on hazardous chemical spills to determine causes.

Securing regulatory compliance by issuing or revoking licenses and persuading or training others to correct problems. Regardless of the methods used to attempt to obtain compliance, the position can ultimately rely on legal authority to impose sanctions and penalties. For example, positions train others on procedures for storing hazardous wastes to remain in compliance with agency regulations.

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories. This goes beyond what has been learned in training or repeating information that is available in another format. For example, positions train others on the use of computer-aided design software so they understand the rationale behind its quantity calculation capabilities.

Negotiating as an official representative of one party in order to obtain support or cooperation where there is no formal rule or law to fall back on in requiring such action or change from the other party. Such negotiation has fiscal or programmatic impact on an agency. In reaching settlements or compromises, the position does not have a rule or regulation to enforce but is accountable for the function. For example, positions negotiate one-time access agreements with landowners for utility construction or survey party use which has fiscal impact.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a unit supervisor, a staff authority, or as an individual contributor. The unit supervisor is accountable, including signature authority, for actions and decisions that directly impact the pay, status, and tenure of three or more full-time equivalent positions. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

OR

The staff authority is a pacesetter who has a unique level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. It is an essential component of the work assignment that has been delegated by management to the position. This authority directly influences management decisions within an agency. For example, management relies on such a position when making decisions regarding the direction that policy

CLASS SERIES DESCRIPTION (Cont'd.)
ENGINEERING/PHYSICAL SCIENCE TECHNICIAN
July 1, 2002

or a program should take in the staff authority's field of expertise. Managers and peers recognize and seek this level of technical guidance and direction regarding the application of a program or system within the agency or to its clients.

OR

The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

NOTE: As a tradeoff, positions allocated to this class under the this individual contributor concept must have Decision Making evaluated at the Process level, and must have Purpose of Contact evaluated at the Clarifying or Negotiating level for one of the two degrees required for this factor.

DEFINITIONS

Engineering - concerned with the practical application of physical and mathematical laws and principles for the development and utilization of machines, instruments, structures, processes, and services.

Physical Sciences - those sciences related to physical matter or energy, such as chemistry, physics, geology, meteorology, hydrology, astronomy, and mathematics.

Technical/Technological - Work in support of professional levels by applying basic technical practices to solve practical problems not involving the application of theories; having to do with the practical or applied sciences.

ENTRANCE REQUIREMENTS

Minimum entry requirements and general competencies for classes in this series are contained in the State of Colorado Department of Personnel & Administration web site.

For purposes of the Americans with Disabilities Act, the essential functions of specific positions are identified in the position description questionnaires and job analyses.

CLASS SERIES HISTORY

Effective 7/1/02 (DLF). PSE System Maintenance Study. No changes. Published as proposed 5/15/02.

Effective 9/1/93 (DLF). Job Evaluation System Revision project. Published as proposed 6/11/93.

CLASS SERIES DESCRIPTION (Cont'd.)
ENGINEERING/PHYSICAL SCIENCE TECHNICIAN
July 1, 2002

Revised 1/15/91. Changed class codes, titles, options, and entrance requirements, E/PS Tech IA - III (A3140-43).

Revised 12/1/86. Changed title, relationship, nature and examples of work, and entrance requirements, Supervising Drill Operator (A4566); Utilities Inspector (A4594).

Revised 7/1/83. Changed relationship, Utilities Inspector (A4594).

Created 7/1/82. E/PS Tech I - III (A3140-43).

Revised 11/1/78. Changed entrance requirements, Senior and Principal Water Commissioners (A6405-06)

Revised 1/1/78. Changed entrance requirements, Senior Water Commissioner (A6405).

Created 1/1/75. Supervising Drill Operator (A4566), Utilities Inspector (A4594), Senior and Principal Water Commissioners (A6405-06), Coal Mine Inspector (A7222), and District Metal Mine Inspector (A7234).

SUMMARY OF FACTOR RATINGS

Class Level	Decision Making	Complexity	Purpose of Contact	Line/Staff Authority
Engin/Phy Science Tech I	Defined	Patterned	Exchange, Detect, or Secure	Indiv. Contributor
Engin/Phy Science Tech II	Operational	Patterned	Detect or Secure	Indiv. Contributor or Work Leader
Engin/Phy Science Tech III	Operational or Process	Patterned	* Detect, Secure, Clarify, or Negotiate	Unit Supervisor, Staff Authority, or Indiv. Contributor

* Must have 2 of 4.

ISSUING AUTHORITY: Colorado Department of Personnel & Administration



STATE OF COLORADO
CLASS SERIES DESCRIPTION
July 1, 2002
ELECTRONICS SPECIALIST

I5E1IX TO I5E5XX

DESCRIPTION OF OCCUPATIONAL WORK

This class series uses five levels in the Physical Sciences and Engineering occupational group and describes the operation, maintenance, installation, and planning for telecommunications and electronic equipment and devices. The work includes design, testing, repair, and modifications to new or existing equipment associated with telephones, microwave, radio, fiber optics, computers, modems, and switching equipment and the related support to these systems. Work may include establishing contractual support, calibrating and certifying equipment, maintaining precision measuring equipment, and/or project design or management for installation or repair of telecommunications or electronic equipment. The work may also entail providing support services to state and non-state customers for electronic or telecommunications services or equipment.

INDEX: Electronics Specialist Intern begins on this page, Electronics Specialist I begins on page 2, Electronics Specialist II begins on page 3, Electronics Specialist III begins on page 4, and Electronics Specialist IV begins on page 6.

ELECTRONICS SPECIALIST INTERN

I5E1IX

CONCEPT OF CLASS

This class describes the entry level. Work is designed to train positions for a higher level in the class series. Although tasks are similar to those of the first-working level, assignments are structured and performed with direction and assistance from others. Positions carry out established work processes and operations by learning to apply and follow procedures, techniques, rules, and regulations. Once training has been completed, the position is to be moved to the next level. Positions should not remain in this class indefinitely.

CLASS SERIES DESCRIPTION (Cont'd.)

ELECTRONICS SPECIALIST

July 1, 2002

ELECTRONICS SPECIALIST I

15E2TX

CONCEPT OF CLASS

This class describes the first-working level. Positions in this level install, operate, troubleshoot, and repair telecommunications or electronic equipment. The work entails responding to work orders or requests for service, working with customers to identify problems or faults, and then completing repairs or ordering necessary parts. Positions record actions taken to solve problems and may initiate billing for services. Positions operate necessary test equipment and maintain tools and supplies.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the defined level, as described here. Within limits prescribed by the operation, choices involve selecting alternatives that affect the manner and speed with which tasks are carried out. These choices do not affect the standards or results of the operation itself because there is typically only one correct way to carry out the operation. These alternatives include independent choice of such things as priority and personal preference for organizing and processing the work, proper tools or equipment, speed, and appropriate steps in the operation to apply. By nature, the data needed to make decisions can be numerous but are clear and understandable so logic is needed to apply the prescribed alternative. Positions can be taught what to do to carry out assignments and any deviation in the manner in which the work is performed does not change the end result of the operation. For example, positions follow established procedures and checklists in repairing equipment.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study technical telecommunications or electronic fault or problem information to determine what it means and how it fits together in order to get practical solutions in the form of operations or repairs to failures. Guidelines in the form of technical repair manuals exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. For example, positions select the most appropriate replacement equipment from available inventory.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. For example, positions interview equipment users to determine problems and the extent of failures.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may explain work

CLASS SERIES DESCRIPTION (Cont'd.)

ELECTRONICS SPECIALIST

July 1, 2002

processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team.

ELECTRONICS SPECIALIST II

I5E3XX

CONCEPT OF CLASS

This class describes the fully-operational level. In addition to work described by the lower levels, positions in this level decide when and how installation and repair actions will occur. The work includes a variety of telecommunications or electronic maintenance activities. Positions are expected to use judgment in selecting or creating solutions to unusual problems or faults. The work entails modifications to existing equipment or installation of new types of devices requiring practical innovations for power, heat, or cooling requirements. This class differs from the Electronics Specialist I in the Decision Making factor and possibly on the Purpose of Contact factor.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to carry out the process. This includes determining how the operation will be completed. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices. For example, positions decide what modifications are made and how equipment will be installed.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study technical drawings or fault isolation data to determine what it means and how it fits together in order to get practical solutions in the form of modifications or installations of equipment. Guidelines in the form of technical repair manuals or design drawings exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. For example, positions choose the appropriate project design based on building codes and equipment specifications.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of at least two of the following:

Exchanging or collecting information with contacts. This involves giving learned information that is readily understandable by the recipient or collecting factual information in order to solve

CLASS SERIES DESCRIPTION (Cont'd.)

ELECTRONICS SPECIALIST

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factual problems, errors, or complaints. For example, positions collect failure and repair information to prepare reports.

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. For example, positions interview equipment users to determine problems and the extent of failures.

Advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions and behaviors. For example, positions advise customers on equipment capabilities and built-in-test capabilities to solve operational problems.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

ELECTRONICS SPECIALIST III

I5E4XX

CONCEPT OF CLASS

This class describes the work leader or staff authority level. In addition to work described by the previous class, positions in this level have work leader responsibilities over others. This may include assigning work, evaluating the quality of work performed, instructing and training on new equipment, or advising on equipment faults. This class also describes those positions functioning as agency authorities on a subject matter where managers and peers rely on the position for expert advice and consultation. This class differs from the Electronics Specialist II class in the Line/Staff Authority factor and possible in the Purpose of Contact factor.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to carry out the process. This includes determining how the operation will be completed. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices. For example, positions decide what modifications are made and how equipment will be installed.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study technical drawings or fault isolation data to determine what it means and how it fits together in order to get practical solutions in the form of modifications or installations of

CLASS SERIES DESCRIPTION (Cont'd.)

ELECTRONICS SPECIALIST

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equipment. Guidelines in the form of technical repair manuals or design drawings exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. For example, positions choose the appropriate project design based on building codes and equipment specifications.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of both of the following:

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. For example, positions interview customers to identify needs of equipment capabilities prior to equipment purchases.

Advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions and behaviors. For example, positions advise organizations/agencies on equipment specifications or capabilities so as to reduce maintenance requirements.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a work leader or staff authority. The work leader is partially accountable for the work product of two or more full-time equivalent positions, including timeliness, correctness, and soundness. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. Typical elements of direct control over other positions by a work leader include assigning tasks, monitoring progress and work flow, checking the product, scheduling work, and establishing work standards. The work leader provides input into supervisory decisions made at higher levels, including signing leave requests and approving work hours. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

OR

The staff authority is a pacesetter who has a unique level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. It is an essential component of the work assignment that has been delegated by management to the position. This authority directly influences management decisions within an agency. For example, management relies on such a position when making decisions regarding the direction that policy or a program should take in the staff authority's field of expertise. Managers and peers recognize and seek this level of technical guidance and direction regarding the application of a program or system within the agency or to its clients.

CLASS SERIES DESCRIPTION (Cont'd.)

ELECTRONICS SPECIALIST

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ELECTRONICS SPECIALIST IV

IS55XX

CONCEPT OF CLASS

This class describes the supervisory level. Positions in this level have responsibility for establishing installation, maintenance, or operating processes used by others. The work also includes responsibility for decisions which affect the pay, status, or tenure of others. This class differs from the Electronics Specialist III in the Decision Making and Line/Staff Authority factors and possibly in the Purpose of Contact factor.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. For example, positions decide operations on obtaining parts or equipment, levels of service, preventative maintenance practices, and/or training provided to customers. The general pattern, program, or system exists but must be individualized. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. For example, positions apply professional standards to project designs and installation of telecommunications equipment. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study designs, program requirements, or equipment technical specification information to determine what it means and how it fits together in order to get practical solutions in the form of work processes or support services to state agencies. Guidelines in the form of allocated budgets, purchase requests, and industry standards exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of at least two of the following:

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. For example, positions interview others to determine causes of failures or poor operations.

CLASS SERIES DESCRIPTION (Cont'd.)

ELECTRONICS SPECIALIST

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Advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions and behaviors. For example, positions guide other agencies in procurement, installation, and operation of electronic equipment to preclude incompatibilities.

Negotiating as an official representative of one party in order to obtain support or cooperation where there is no formal rule or law to fall back on in requiring such action or change from the other party. Such negotiation has fiscal or programmatic impact on an agency. In reaching settlements or compromises, the position does not have a rule or regulation to enforce but is accountable for the function. For example, positions negotiate levels of service to other agencies which has programmatic or fiscal impact on one or both.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a unit supervisor, a staff authority, or an individual contributor. The unit supervisor is accountable, including signature authority, for actions and decisions that directly impact the pay, status, and tenure of three or more full-time equivalent positions. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

OR

The staff authority is a pacesetter who has a unique level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. It is an essential component of the work assignment that has been delegated by management to the position. This authority directly influences management decisions within an agency. For example, management relies on such a position when making decisions regarding the direction that policy or a program should take in the staff authority's field of expertise. Managers and peers recognize and seek this level of technical guidance and direction regarding the application of a program or system within the agency or to its clients.

OR

The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

NOTE: Staff Authority and Individual Contributor positions at this level must have Decision Making at the Process level, and Purpose of Contact must include Negotiating.

CLASS SERIES DESCRIPTION (Cont'd.)

ELECTRONICS SPECIALIST

July 1, 2002

DEFINITION

Telecommunications: technician work in the installation modification, and repair of communications equipment, analog and/or digital, between sites using appropriate transmission media [including radio frequency (r/f)]. The work includes both hardware and software components.

ENTRANCE REQUIREMENTS

Minimum entry requirements and general competencies for classes in this series are contained in the State of Colorado Department of Personnel & Administration web site.

For purposes of the Americans with Disabilities Act, the essential functions of specific positions are identified in the position description questionnaires and job analyses.

CLASS SERIES HISTORY

Effective 7/1/02 (DLF). PSE System Maintenance Study. Broadened series description of work to electronics specialist from narrower telecommunications/electronics specialist. Changed class series title from Telecommunications/Electronics Specialist to Electronics Specialist. Published as proposed 5/15/02.

Effective 9/1/93 (DLF). Job Evaluation System Revision project. Published as proposed 6/1/93, 2/1/94.

Revised 9/1/88. Changed titles, options, nature of work, and entrance requirements, Telecommunications/Electronics Specialist (A2550-54).

Revised 7/1/86. Changed relationships, Telecommunications/Electronics Specialist (A2550-54).

Revised 7/1/84. Changed relationships, Telecommunications/Electronics Specialist (A2550-53).

Revised 7/1/82. Changed relationships, Telecommunications/Electronics Specialist (A2550-54), Telephone and Wire Services Specialist (A2560).

Revised 2/1/80. Changed options and overtime status, Senior Telecommunications/Electronics Specialist (A2553).

Created 1/1/75. Telecommunications/Electronics Specialist (A2550-54), Telephone and Wire Services Specialist (A2560).

CLASS SERIES DESCRIPTION (Cont'd.)
ELECTRONICS SPECIALIST
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SUMMARY OF FACTOR RATINGS

Class Level	Decision Making	Complexity	Purpose of Contact	Line/Staff Authority
Electronics Specialist Intern	na	na	na	na
Electronics Specialist I	Defined	Patterned	Detect	Indiv. Contributor
Electronics Specialist II	Operational	Patterned	* Exchange, Detect, or Advise	Indiv. Contributor
Electronics Specialist III	Operational	Patterned	Detect & Advise	Work Leader or Staff Authority
Electronics Specialist IV	Process	Patterned	* Detect, Advise, or Negotiate	Unit Supervisor, Staff Authority, or Indiv. Contributor**

* Must have 2 or 3.

** See description for requirements on factors of the individual contributor.

ISSUING AUTHORITY: Colorado Department of Personnel & Administration



STATE OF COLORADO

CLASS SERIES DESCRIPTION

July 1, 2002

LABORATORY COORDINATOR

I9A1TX TO I9A3XX

DESCRIPTION OF OCCUPATIONAL WORK

This class series uses three levels in the Physical Sciences and Engineering occupational group and describes work in support of educators and researchers in the physical sciences. Also included in this class series is work in support of educators in the Professional Services Occupational Group, including the biological sciences, fine arts, and other areas. Positions in this class series provide laboratory-related support services to positions involved in research and/or student education.

INDEX: Laboratory Coordinator I begins on this page, Laboratory Coordinator II begins on page 2, and Laboratory Coordinator III begins on page 4.

LABORATORY COORDINATOR I

I9A1TX

CONCEPT OF CLASS

This class describes the first-level laboratory coordinator. Positions in this level oversee and monitor the activities of a laboratory. Duties include, but are not limited to, scheduling the use of and/or setting up of laboratory apparatus and equipment, materials and supplies, and space; training students or others to use laboratory equipment to conduct experiments; ordering supplies, maintaining inventories, and distributing supplies; ordering, maintaining, and repairing apparatus and equipment; developing laboratory record keeping systems and maintaining appropriate laboratory records; and producing necessary reports concerning laboratory activities.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

CLASS SERIES DESCRIPTION (Cont'd.)

LABORATORY COORDINATOR

July 1, 2002

Decision Making -- The decisions regularly made are at the defined level, as described here. Within limits prescribed by the operation, choices involve selecting alternatives that affect the manner and speed with which tasks are carried out. These choices do not affect the standards or results of the operation itself because there is typically only one correct way to carry out the operation. For example, a position decides to schedule student experiments based on laboratory manuals, instructor lecture schedules and topics, and laboratory use requested by instructors. These alternatives include independent choice of such things as priority and personal preference for organizing and processing the work, proper tools or equipment, speed, and appropriate steps in the operation to apply. By nature, the data needed to make decisions can be numerous but are clear and understandable so logic is needed to apply the prescribed alternative. Positions can be taught what to do to carry out assignments and any deviation in the manner in which the work is performed does not change the end result of the operation.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study technical information to determine what it means and how it fits together in order to get practical solutions in the form of operating procedures, modified methods for specific laboratory tests and experiments, and solutions to equipment malfunctions not specifically covered by manuals. Guidelines in the form of accepted techniques, equipment manuals, quality control standards, and allocated operating funds exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. For example, a position modifies or substitutes apparatus in order to better illustrate a physical concept appropriate to the situation.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions and behaviors. For example, a position advises staff on the use of a new piece of equipment and correct staff actions that were causing problems with the proper use of the equipment.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

LABORATORY COORDINATOR II

I9A2XX

CONCEPT OF CLASS

This class describes the second-level laboratory coordinator. While duties and responsibilities are similar to those of a Teaching Laboratory Coordinator I, positions have greater decision making responsibility for selecting experimental methods and test procedures and may have work leader

CLASS SERIES DESCRIPTION (Cont'd.)

LABORATORY COORDINATOR

July 1, 2002

responsibilities. The Laboratory Coordinator II differs from the Laboratory Coordinator I on the Decision Making factor and may differ on the Line/Staff Authority factor.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to carry out the process. This includes determining how the operation will be completed. For example, positions determine operating and record keeping procedures, develop testing and experiment methods by adapting accepted techniques, and approve expenditures of operating funds for supplies. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices. As an example, positions select or fabricate new laboratory apparatus needed to carry out a new laboratory process.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study technical information to determine what it means and how it fits together in order to get practical solutions in the form of operating procedures, modified methods for specific laboratory tests and experiments, and solutions to equipment malfunctions not specifically covered by manuals. Guidelines in the form of accepted techniques, equipment manuals, quality control standards, and allocated operating funds exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions and behaviors. For example, a position advises staff on the use of a new piece of equipment and correct staff actions that were causing problems with the proper use of the equipment.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor or work leader. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

OR

CLASS SERIES DESCRIPTION (Cont'd.)

LABORATORY COORDINATOR

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The work leader is partially accountable for the work product of two or more full-time equivalent positions, including timeliness, correctness, and soundness. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. Typical elements of direct control over other positions by a work leader include assigning tasks, monitoring progress and work flow, checking the product, scheduling work, and establishing work standards. The work leader provides input into supervisory decisions made at higher levels, including signing leave requests and approving work hours. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

LABORATORY COORDINATOR III

I9A3XX

CONCEPT OF CLASS

This class describes the highest-level laboratory coordinator. In addition to the duties and responsibilities of laboratory coordinators, positions at this level have greater responsibility for designing laboratory processes, writing laboratory manuals, and teaching courses. The Laboratory Coordinator III differs from the Laboratory Coordinator II on the Decision Making, Complexity and Purpose of Contact factors and may differ on the Line/Staff Authority factor.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. As an example, positions determine operating budget requests. The general pattern, program, or system exists but must be individualized. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. For example, positions design the safety standards and processes for testing students ability to safely use equipment. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

Complexity -- The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of physical theories, concepts, and principles in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. For example, a position consolidates theoretical concepts in adapting laboratory manuals and experiments for student use. While general policy, precedent, or non-specific practices exist, they are inadequate so they are relevant only through approximation or analogy. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing guidelines so they can be applied to particular circumstances and to deal with emergencies. For example, a position makes changes in

CLASS SERIES DESCRIPTION (Cont'd.)

LABORATORY COORDINATOR

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laboratory policies and procedures based on new theories and concepts that impact laboratory operations.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories. This goes beyond what has been learned in training or repeating information that is available in another format. As an example, positions write theoretical portions of laboratory manuals and/or teach theoretical materials in a classroom setting.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a work leader, staff authority, or unit supervisor. The work leader is partially accountable for the work product of two or more full-time equivalent positions, including timeliness, correctness, and soundness. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. Typical elements of direct control over other positions by a work leader include assigning tasks, monitoring progress and work flow, checking the product, scheduling work, and establishing work standards. The work leader provides input into supervisory decisions made at higher levels, including signing leave requests and approving work hours. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

OR

The staff authority is a pacesetter who has a unique level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. It is an essential component of the work assignment that has been delegated by management to the position. This authority directly influences management decisions within an agency. For example, management relies on such a position when making decisions regarding the direction that policy or a program should take in the staff authority's field of expertise. Managers and peers recognize and seek this level of technical guidance and direction regarding the application of a program or system within the agency or to its clients.

OR

The unit supervisor is accountable, including signature authority, for actions and decisions that directly impact the pay, status, and tenure of three or more full-time equivalent positions. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

CLASS SERIES DESCRIPTION (Cont'd.)
LABORATORY COORDINATOR
July 1, 2002

ENTRANCE REQUIREMENTS

Minimum entry requirements and general competencies for classes in this series are contained in the State of Colorado Department of Personnel & Administration web site.

For purposes of the Americans with Disabilities Act, the essential functions of specific positions are identified in the position description questionnaires and job analyses.

CLASS SERIES HISTORY

Effective 7/1/02 (DLF). PSE System Maintenance Study. No changes. Published as proposed 5/15/02.

Effective 9/1/93 (KAS). Job Evaluation System Revision project. Published as proposed 6/1/93.

Revised 1/1/86 Change in relationship and in-grade hire step.

Created 4/1/78. Laboratory Coordinator.

SUMMARY OF FACTOR RATINGS

Class Level	Decision Making	Complexity	Purpose of Contact	Line/Staff Authority
Laboratory Coordinator I	Defined	Patterned	Advise	Indiv. Contributor
Laboratory Coordinator II	Operational	Patterned	Advise	Indiv. Contributor or Work Leader
Laboratory Coordinator III	Process	Formulative	Clarify	Work Leader, Staff Authority, or Unit Supervisor

ISSUING AUTHORITY: Colorado Department of Personnel & Administration



STATE OF COLORADO
CLASS SERIES DESCRIPTION
July 1, 2002

LAND SURVEYOR

I9B1IX TO I9B4XX

DESCRIPTION OF OCCUPATIONAL WORK

This class series uses four levels in the Physical Science and Engineering occupational group and describes land surveying work. The work entails the conduct and/or oversight of land survey work in support of engineering projects or other programs. The work involves the application of surveying knowledge or oversight for determining the relative position and areas of property, preparation of maps, plats, legal descriptions, and other survey records/documentation, and establishing survey control for property boundary determinations. Land surveying consists of the performance of work requiring the use of the principles of mathematics, the related physical and applied sciences, and the relevant requirements of law to plan and complete right-of-way plans and legal descriptions. The work may include assisting in the resolution of boundary disputes.

Positions in the upper two classes must be licensed as a Professional Land Surveyor (PLS) in accordance with CRS 12-25-201, et.seq., to perform and/or certify (stamp/seal) surveys performed under their direction/supervision.

INDEX: Land Survey Intern I begins on this page, Land Survey Intern II begins on page 2, Professional Land Surveyor I begins on page 3, and Professional Land Surveyor II begins on page 5.

LAND SURVEY INTERN I

I9B1IX

CONCEPT OF CLASS

This class describes the entry level to this series. Work is designed to train positions for a higher level in the class series. Although tasks are similar to those of the next working level,

CLASS SERIES DESCRIPTION (Cont'd.)

LAND SURVEYOR

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assignments are structured and performed with direction and assistance from others. Positions carry out surveying work processes and operations by learning to apply and follow surveying procedures, techniques, rules and regulations. Once training has been completed, the position may be moved to the next level.

LAND SURVEY INTERN II

I9B2TX

CONCEPT OF CLASS

This class describes the operational, unlicensed surveyor level. Positions in this class perform surveying work as part of a crew or individually. Positions apply the fundamentals of land surveying as they gain practical experience under the direction/supervision of a licensed Professional Land Surveyor. The work may include researching/collecting previous survey or ownership data or records filed with county authorities; planning the conduct of the physical survey with manual, electronic, or computerized equipment, including satellite data; actually performing, as crew chief or an assistant, the on-site survey measurements and data collection; discovering monuments; transcribing, validating, and compiling or analyzing survey data via various computer software programs; and translating data into survey and/or right-of-way documents. Positions may review the work of other surveyors for quality control purposes and train less experienced survey interns in surveying practices and methods. Positions in this class differ from the previous Land Survey Intern I class in all factors.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to carry out the process. This includes determining how the operation will be completed. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices. For example, positions decide how individual survey projects will be sequenced or determining survey measurements.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions review design, study, or plan information to determine what it means and how it fits together in order to get practical solutions in the form of measurement methods. Guidelines in the form of rules, standards, contracts, regulations, or specifications exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. For example, positions search various public records for relevant data to identify probable location of property corners/monuments.

CLASS SERIES DESCRIPTION (Cont'd.)

LAND SURVEYOR

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Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of either of the following:

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. For example, positions contact property owners to discover information on property corners/boundaries or to obtain property access permissions.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor or as a work leader. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team.

OR

The work leader is partially accountable for the work product of two or more full-time equivalent positions, including timeliness, correctness, and soundness. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. Typical elements of direct control over other positions by a work leader include assigning tasks, monitoring progress and work flow, checking the product, scheduling work, and establishing work standards. The work leader provides input into supervisory decisions made at higher levels, including signing leave requests and approving work hours. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

PROFESSIONAL LAND SURVEYOR I

I9B3XX

CONCEPT OF CLASS

This class describes the fully operational, licensed Professional Land Surveyor authorized to certify survey documents and legal records. As the responsible charge person for survey work, positions are responsible to oversee all aspects of boundary and area surveying. Positions in this level train other non-licensed positions in the practices and methods of land surveying. Positions also file appropriate monument documents and right-of-way plans with county authorities. A primary responsibility of positions in this class is to stamp/certify surveying documents. Positions in this class differ from the previous Land Survey Intern II class in the Decision Making and Complexity factors based on use of the PLS licensure authorities and may differ in the Line/Staff Authority factor.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, and

CLASS SERIES DESCRIPTION (Cont'd.)

LAND SURVEYOR

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program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. The general pattern, program, or system exists but must be individualized. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. For example, positions decide appropriate methods for locating property rights and establishing monuments necessary to identify property boundaries.

Complexity -- The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of surveying and mathematical sciences and physics theories, concepts, and principles in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. While general policy, precedent, or non-specific practices exist, they are inadequate so they are relevant only through approximation or analogy. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing guidelines so they can be applied to particular circumstances and to deal with emergencies. For example, positions analyze known surveying principles, practices, and case law to evaluate the field evidence and written records to decide how to weigh boundary evidence. In addition, positions analyze satellite signal propagation principles when locating GPS control points and designing High Accuracy Networks (HARN) patterns.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of at least one of the following:

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories. This goes beyond what has been learned in training or repeating information that is available in another format. For example, positions train others on the use of satellite, computer-aided survey equipment so they understand the rationale behind its calculation capabilities and limits.

OR

Negotiating as an official representative of one party in order to obtain support or cooperation where there is no formal rule or law to fall back on in requiring such action or change from the other party. Such negotiation has fiscal or programmatic impact on an agency. In reaching settlements or compromises, the position does not have a rule or regulation to enforce but is accountable for the function. For example, positions negotiate consultant services or boundary dispute agreements with landowners which have fiscal impact.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor or work leader. The direct field of influence the work of a position has on the organization is as an individual contributor or as a work leader. The individual contributor may explain work processes and train others. The individual

CLASS SERIES DESCRIPTION (Cont'd.)

LAND SURVEYOR

July 1, 2002

contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team.

OR

The work leader is partially accountable for the work product of two or more full-time equivalent positions, including timeliness, correctness, and soundness. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. Typical elements of direct control over other positions by a work leader include assigning tasks, monitoring progress and work flow, checking the product, scheduling work, and establishing work standards. The work leader provides input into supervisory decisions made at higher levels, including signing leave requests and approving work hours. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

PROFESSIONAL LAND SURVEYOR II

19B4XX

CONCEPT OF CLASS

This class describes the unit supervisor or staff authority level. The work generally involves the identification, planning, review, and approval of land surveys, right-of-way plans and legal descriptions; prepares scopes of work for consultant contracts, participates in the consultant selection process, and reviews and approves payments. Positions oversee the allocated equipment, personnel, and budgetary resources needed to perform survey projects in support of pre-construction and construction work or other survey needs. The work may also include advising counties on Geographic Information Systems (GIS); using the Global Positioning System (GPS) for surveys and HARN patterns; conducting surveys for surplus property or right-of-way determinations; or managing surveying consultants. At the staff level, positions plan, organize, and evaluate agency survey programs to support engineering or other programs requiring survey support. The work may include coordinating with external survey agencies on regulatory aspects to insure the agency's professional survey programs conform to state regulations and statutes governing land surveying. As a staff authority, the position plans agency survey operations and advises managers, engineers, and other surveyors on the implementation of the statewide, agency survey program. This class differs from the Professional Land Surveyor I class in Line/Staff Authority factor and may differ in the Complexity factor.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. The general pattern, program, or system exists but must be individualized. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and

CLASS SERIES DESCRIPTION (Cont'd.)

LAND SURVEYOR

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reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. For example, positions apply scientific surveying principles in deciding the scope of work for survey contracts on design projects.

OR

The decisions regularly made are at the interpretive level, as described here. Within limits of the strategic master plan and allocated human and fiscal resources, choices involve determining tactical plans to achieve the objectives established by the higher management (strategic) level. This involves establishing what processes will be done, developing the budget, and developing the staffing patterns and work units in order to deploy staff. For example, positions develop unit budgets and staffing requirements for operating a survey unit.

This level of Decision Making also includes inventing and changing systems and guidelines that will be applied by others statewide. By nature, this is the first level where positions are not bound by processes and operations in their own programs as a framework for decision making and there are novel or unique situations that cause uncertainties that must be addressed at this level. Through deliberate analysis and experience with these unique situations, the manager or expert decides the surveying systems, guidelines, and programs for the future. For example, position decides survey specifications for an agency's survey program.

Complexity --The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of surveying and mathematical sciences and physics theories, concepts, and principles in order to tailor them to develop a different approach or tactical plan to fit specific circumstances. While general policy, precedent, or non-specific practices exist, they are inadequate so they are relevant only through approximation or analogy. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing guidelines so they can be applied to particular circumstances and to deal with emergencies. For example, positions analyze known surveying principles, practices, and case law to develop agency surveying specifications. In addition, positions analyze the intent of legal documents, land descriptions, prior surveys, and legal precedents to make boundary/corner determinations for possible land acquisitions.

OR

The nature of, and need for, analysis and judgment is strategic, as described here. Positions develop guidelines to implement a survey program that maintains the agency's mission. Guidelines do not exist for most situations. In directive situations, positions use judgment and resourcefulness to interpret circumstances in a variety of situations and establish guidelines that direct how a departmental/agency land surveying program will be implemented. For example, positions establish agency guidelines on managing consultant contracts or on monumenting requirements as directed by the State Board of Registration for Professional Engineers and Professional Land Surveyors.

CLASS SERIES DESCRIPTION (Cont'd.)

LAND SURVEYOR

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Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of at least one of the following:

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories. This goes beyond what has been learned in training or repeating information that is available in another format. For example, positions explain the intent of survey projects to consultants.

OR

Negotiating as an official representative of one party in order to obtain support or cooperation where there is no formal rule or law to fall back on in requiring such action or change from the other party. Such negotiation has fiscal or programmatic impact on an agency. In reaching settlements or compromises, the position does not have a rule or regulation to enforce but is accountable for the function. For example, positions negotiate consultant agreements for the conduct of surveys.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a unit supervisor or staff authority. The unit supervisor is accountable, including signature authority, for actions and decisions that directly impact the pay, status, and tenure of three or more full-time equivalent positions. At least one of the subordinate positions must be a Professional Land Surveyor or at a comparable conceptual level. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

OR

The staff authority is a pacesetter who has a rare level of technical expertise in a field or profession that, as part of the assignment, is critical to the success of an agency. This authority directly influences management decisions at least on an agency-wide basis. Managers and peers recognize and seek this level of technical guidance and direction for development of an agency-wide system or regarding the application of a statewide surveying system within the agency or to its clients.

DEFINITIONS

Land Surveying: As defined in CRS 12-25-202 - Professional land surveying means any service or work, the adequate performance of which involves: The application of special knowledge of the principles of mathematics; the related physical and applied sciences; and the relevant requirements of law for measuring and locating points, lines, angles, elevations, and the non-natural features in the air, on the surface of the earth, within underground workings, and on the beds of bodies of water for determining relative position and areas as they pertain to the monumenting of property boundaries, condominium measurements, and the platting and layout

CLASS SERIES DESCRIPTION (Cont'd.)

LAND SURVEYOR

July 1, 2002

of lands and subdivisions thereof, including the topography, alignment, and grades of streets and for the preparation of maps, record plats, field note records, and property or legal descriptions that represent these surveys. Professional land surveying may also include other types of surveying.

Professional Land Surveyor: as used in this class description, it is the equivalency of such individuals defined by statutes and rules under the purview of the Colorado State Board of Registration for Professional Engineers and Professional Land Surveyors.

ENTRANCE REQUIREMENTS

Minimum entry requirements and general competencies for classes in this series are contained in the State of Colorado Department of Personnel & Administration web site.

For purposes of the Americans with Disabilities Act, the essential functions of specific positions are identified in the position description questionnaires and job analyses.

CLASS SERIES HISTORY

Effective 7/1/02 (DLF). PSE System Maintenance Study. No changes. Published as proposed 5/15/02.

Effective 1/1/98 (DLF). Added two lower classes to series and revised concept for two upper classes. Published as proposed 10/22/97.

Effective 9/1/93 (DLF). Job Evaluation System Revision project. Published as proposed 6/1/93.

Created 1/15/91. Survey Coordinator (A3050).

SUMMARY OF FACTOR RATINGS

Class Level	Decision Making	Complexity	Purpose of Contact	Line/Staff Authority
Land Survey Intern I	na	na	na	na
Land Survey Intern II	Operational	Patterned	Detect	Individual Contributor or Work Leader
Professional Land Surveyor I	Process	Formulative	Clarify or Negotiate	Individual Contributor or Work Leader
Professional Land Surveyor II	Process or Interpretive	Formulative or Strategic	Clarify or Negotiate	Unit Supervisor or Staff Authority

ISSUING AUTHORITY: Colorado Department of Personnel & Administration.



SYSTEM MAINTENANCE STUDY

NARRATIVE REPORT -- FINAL CHANGES

Elimination of Vacant Classes

Conducted Fiscal Year 2001-2002

BACKGROUND AND PURPOSE OF STUDY

This system-wide study is part of the Department of Personnel & Administration's (hereafter "the department") statutory responsibility, CRS 24-50-104(1)(b), for maintaining and revising the system of classes covering all positions in the state personnel system. Such maintenance may include the assignment of appropriate pay grades that reflect prevailing wage as mandated by CRS 24-50-104(1)(a).

This specific study is conducted each year to eliminate those classes that are vacant and no longer used. The process maintains a current, accurate class plan for all users. This relatively simple housekeeping process also reduces the number of classes, which contributes to the goal of fewer, broader classes.

METHODOLOGY

A list of vacant classes from the employee database (EMPL) was obtained. Each occupational specialist examined the list of classes and selected those being proposed for abolishment. A list of eight potential classes was emailed and broadcast faxed to all human resources (HR) administrators on January 18, 2002. The personnel administrators were asked to reply only if they wished to request retention of a class and to provide rationale. Such responses were due by February 4, 2002.

Three of the classes are used for promotional purposes and will be retained. Two classes are entry level and agencies anticipate that they may need them in the next year. The remaining three classes will be abolished. The Broadcast Specialist I and II are the only classes in the series and are not being used. The Transportation Maintenance IV class is the top level in the series and is not needed.

The Department of Revenue requested that two additional classes be added to the list during this process, Port of Entry IV and Hearings Officer IV. These two classes were used exclusively by that department and will be abolished.

It should be noted that any class being eliminated might be recreated if the need should arise in the future.

RECOMMENDATION

The following five classes will be abolished on July 1, 2002. The class descriptions for Transportation Maintenance, Port of Entry and Hearings Officer are included in this document.

CODE	CLASS TITLE
D7D4XX	Transportation Maintenance IV
H3B1XX	Broadcast Specialist I
H3B2XX	Broadcast Specialist II
H4Q5XX	Port of Entry Officer IV
H5F4XX	Hearings Officer IV

FISCAL IMPACT FOR IMPLEMENTATION YEAR

There is no fiscal impact from this study. These classes are vacant and no current employee is affected.



STATE OF COLORADO

CLASS SERIES DESCRIPTION

July 1, 2002

TRANSPORTATION MAINTENANCE

D7D1TX TO D7D3XX

DESCRIPTION OF OCCUPATIONAL WORK

This class series uses three levels in the Labor, Trades, and Crafts occupational group and describes work which involves building and maintaining roadways, tunnels, and adjoining areas. Work involves building, maintaining, repairing, or cleaning highway or tunnel surfaces, bridges, guardrails, and surrounding landscaped areas; removing snow, ice or debris from roadways; monitoring road and traffic conditions, counting and controlling highway and tunnel traffic, and directing vehicles; and assisting emergency response personnel at accident scenes.

INDEX: Transportation Maintenance I begins on this page, Transportation Maintenance II begins on page 2, Transportation Maintenance III begins on page 3.

TRANSPORTATION MAINTENANCE I

D7D1TX

CONCEPT OF CLASS

This class describes fully-operating highway and tunnel maintenance work. Positions operate independently to perform the full range of tasks and determine solutions to the full range of problems. Judgment is used to select the most appropriate guidelines and adapt them to accomplish the tasks. Positions continually determine practical solutions to problems and applying specific processes, techniques, and methods. Positions serve as a resource to others. Some assignments do not move beyond this level.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

CLASS SERIES DESCRIPTION (Cont'd.)

TRANSPORTATION MAINTENANCE

July 1, 2002

Decision Making -- The decisions regularly made are at the defined level, as described here. Within limits prescribed by the operation, choices involve selecting alternatives that affect the manner and speed with which tasks are carried out. These choices do not affect the standards or results of the operation itself because there is typically only one correct way to carry out the operation. These alternatives include independent choice of such things as priority and personal preference for organizing and processing the work, proper tools or equipment, speed, and appropriate steps in the operation to apply. By nature, the data needed to make decisions can be numerous but are clear and understandable so logic is needed to apply the prescribed alternative. Positions can be taught what to do to carry out assignments and any deviation in the manner in which the work is performed does not change the end result of the operation.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study information to determine what it means and how it fits together in order to get practical solutions. Guidelines exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of exchanging or collecting information with contacts. This involves giving learned information that is readily understandable by the recipient or collecting factual information in order to solve factual problems, errors, or complaints. For example, positions explain transportation rules and regulations to landowners and others wanting the right-of-way sprayed, listen to public complaints and respond to them, and advise the dispatcher of weather and road conditions.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

TRANSPORTATION MAINTENANCE II

D7D2XX

CONCEPT OF CLASS

This class describes the work leader. In addition to the duties and responsibilities of a Transportation Maintenance Worker I, work leaders are partially accountable for the work product of two or more full-time equivalent positions. Positions monitor work schedules, maintain equipment and supplies, train new employees, and maintain leave records. This class differs from the Transportation Maintenance Worker I on Decision Making and Line/Staff Authority.

CLASS SERIES DESCRIPTION (Cont'd.)

TRANSPORTATION MAINTENANCE

July 1, 2002

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to carry out the process. This includes determining how the operation will be completed. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study information to determine what it means and how it fits together in order to get practical solutions. Guidelines exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of exchanging or collecting information with contacts. This involves giving learned information that is readily understandable by the recipient or collecting factual information in order to solve factual problems, errors, or complaints. For example, positions explain transportation rules and regulations to landowners and others wanting the right-of-way sprayed, listen to public complaints and respond to them, and advise the dispatcher of weather and road conditions.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a work leader. The work leader is partially accountable for the work product of two or more full-time equivalent positions, including timeliness, correctness, and soundness. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. Typical elements of direct control over other positions by a work leader include assigning tasks, monitoring progress and work flow, checking the product, scheduling work, and establishing work standards. The work leader provides input into supervisory decisions made at higher levels, including signing leave requests and approving work hours. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

TRANSPORTATION MAINTENANCE III

D7D3XX

CONCEPT OF CLASS

This class describes the first-supervisory level. Supervisory positions are accountable for actions and decisions that impact pay, status, and tenure of three or more full-time equivalent positions. Positions at this level function as supervisors and may perform some of the duties of the lower

CLASS SERIES DESCRIPTION (Cont'd.)
TRANSPORTATION MAINTENANCE
July 1, 2002

level classes in this series. This class differs from the Transportation Maintenance II on Purpose of Contact and Line/Staff Authority.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to carry out the process. This includes determining how the operation will be completed. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established process. Choices are within a range of specified, acceptable standards, alternatives, and technical practices.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study information to determine what it means and how it fits together in order to get practical solutions. Guidelines exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of any the following:

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time.

Securing regulatory compliance by issuing or revoking licenses and persuading or training others to correct problems. Regardless of the methods used to attempt to obtain compliance, the position can ultimately rely on legal authority to impose sanctions and penalties.

Advising, counseling, or guiding the direction taken to resolve complaints or problems and influence or correct actions or behaviors.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a unit supervisor. The unit supervisor is accountable, including signature authority, for actions and decisions that directly impact pay, status, and tenure of three or more full-time equivalent positions. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

CLASS SERIES DESCRIPTION (Cont'd.)
TRANSPORTATION MAINTENANCE
July 1, 2002

ENTRANCE REQUIREMENTS

Minimum entry requirements and general competencies for classes in this series are contained in the State of Colorado Department of Personnel & Administration web site.

For purposes of the Americans with Disabilities Act, the essential functions of specific positions are identified in the position description questionnaires and job analyses.

CLASS SERIES HISTORY

Effective 7/1/02 (JEM). Abolished vacant Transportation Maintenance IV (D7D4). Published as proposed 1/18/02.

Effective 7/1/99 (PVO). LTC consolidation study consolidated Highway Maintenance (D1F) and Tunnel Maintenance (D2T). Highway Maintenance Superintendent I and II, and Tunnel Maintenance Superintendent abolished. Draft published 3/31/99 and proposed 7/1/99.

Effective 9/1/93 (LDS). Job Evaluation System Revision project. Published proposed 5/24/93 (Highway Maintenance--D1F) and 6/1/93 (Tunnel Maintenance--D2T).

Revised 7/1/87. Deleted options and changed entrance requirements of Highway Maintenance Supervisor (A4673X), changed entrance requirements on Senior Highway Maintenance Supervisor (A4674X).

Revised 7/1/87. Deleted options and changed entrance requirements of Highway Maintenance Superintendent III (A4677X).

Revised 12/1/86. Changed class code, relationship, and entrance requirements on Highway Maintenance Superintendent III (A4677X).

Revised 12/1/86. Changed title on Highway Maintenance Superintendent III (A4677X).

Revised 12/1/86. Changed class code, relationship, and entrance requirements on Highway Maintenance Worker A (4670X), Highway Maintenance Worker B (4671X), changed class code, title, relationship, and entrance requirements Senior Highway Maintenance Worker (4672X), Highway Maintenance Supervisor (A4673X), and Senior Highway Maintenance Supervisor (A4674X). Changed class code, title, relationship, nature of work and entrance requirements on Tunnel Maintenance Worker (A4682X), Senior Tunnel Maintenance Worker (A4683X), Tunnel Supervisor (A4684X) and Senior Tunnel Supervisor (A4685X).

Revised 12/1/86. Changed class code, title, relationship, and entrance requirements on Highway Maintenance Superintendent I (A4675X) and Eisenhower Tunnel Superintendent I (A4686X).

Revised 1/1/84. Changed entrance requirement on Senior Tunnel Supervisor (A4685X).

CLASS SERIES DESCRIPTION (Cont'd.)

TRANSPORTATION MAINTENANCE

July 1, 2002

Revised 7/1/83. Changed relationship on Highway Maintenance Worker A (4670X), Highway Maintenance Worker B (4671X), Senior Highway Maintenance Worker (4672X), Highway Maintenance Supervisor (A4673X), Senior Highway Maintenance Supervisor (A4674X), Tunnel Maintenance Worker (A4682X), Tunnel Supervisor (A4684X), and Senior Tunnel Supervisor (A4685X).

Revised 7/1/83. Changed relationship on Highway Maintenance Superintendent I (A4675X) and Eisenhower Tunnel Superintendent I (A4686X).

Revised 7/1/81. Changed grade and relationship on Highway Maintenance Superintendent I (A4675X) and Highway Maintenance Superintendent III (A4677X).

Revised 7/1/81. Eisenhower Tunnel Superintendent I (A4686X).

Revised 7/1/80. Changed relationship on Highway Maintenance Worker A (4670X), Highway Maintenance Worker B (4671X), Senior Highway Maintenance Worker (4672X), Highway Maintenance Supervisor (A4673X), Senior Highway Maintenance Supervisor (A4674X), and Senior Tunnel Supervisor (A4685X).

Revised 7/1/80. Changed relationship on Highway Maintenance Superintendent I (A4675X) and on Highway Maintenance Superintendent III (A4677X).

Revised 7/1/80. Changed entrance requirements on Eisenhower Tunnel Superintendent I (A4686X).

Revised 9/1/78. Deleted options and changed entrance requirements on Tunnel Supervisor (A4684X) and Senior Tunnel Supervisor (A4685X).

Revised 12/1/76. Added option and changed entrance requirements of Highway Maintenance Supervisor (A4673X).

Revised 11/1/76. Added option to Senior Highway Maintenance Worker (4672X).

Created 1/1/75. Highway Maintenance Worker A (4670X), Highway Maintenance Worker B (4671X), Senior Highway Maintenance Worker (4672X), Highway Maintenance Supervisor (A4673X), Senior Highway Maintenance Supervisor (A4674X), Tunnel Maintenance Worker (A4682X), Senior Tunnel Maintenance Worker (A4683X), Tunnel Supervisor (A4684X), and Senior Tunnel Supervisor (A4685X).

Created 1/1/75. Highway Maintenance Superintendent I (A4675X) and Eisenhower Tunnel Superintendent I (A4686X).

CLASS SERIES DESCRIPTION (Cont'd.)
TRANSPORTATION MAINTENANCE
July 1, 2002

SUMMARY OF FACTOR RATINGS

Class Level	Decision Making	Complexity	Purpose of Contact	Line/Staff Authority
Transportation Maintenance I	Defined	Patterned	Exchange	Indiv. Contributor
Transportation Maintenance II	Operational	Patterned	Exchange	Work Leader
Transportation Maintenance III	Operational	Patterned	Detect, Secure, & Advise	Unit Supervisor

ISSUING AUTHORITY: Colorado Department of Personnel & Administration



STATE OF COLORADO

CLASS SERIES DESCRIPTION

July 1, 2002

PORT OF ENTRY

H4Q1IX TO H4Q4XX

DESCRIPTION OF OCCUPATIONAL WORK

This class series uses four levels in the Professional Services occupational group and describes inspection and revenue collection to process commercial vehicles and their cargos through fixed and mobile ports of entry. The work performed in this occupation involves verifying compliance with size-weight-load regulations, motor vehicle regulations, and minimum safety standards, including hazardous materials transportation and checking for impaired drivers or contraband; selling permits and issuing penalty assessments and citations; and collecting fees, taxes, and fines.

INDEX: Port of Entry Intern and Port of Entry Officer I begin on this page, Port of Entry Officer II begins on page 3, Port of Entry Officer III begins on page 5.

PORT OF ENTRY INTERN

H4Q1IX

CONCEPT OF CLASS

This class describes the entry level. Work is designed to train positions for a higher level in the class series. Although tasks are similar to those of the fully-operational level, assignments are structured and performed with direction and assistance from others. Positions carry out established work processes and operations by learning to apply and follow procedures, techniques, rules, and regulations. Once training has been completed, the position is to be moved to the next level. Positions should not remain in this class indefinitely.

PORT OF ENTRY OFFICER I

H4Q2TX

CONCEPT OF CLASS

CLASS SERIES DESCRIPTION (Cont'd.)

PORT OF ENTRY

July 1, 2002

This class describes the fully-operational port of entry officer. Positions in this level physically inspect the condition of commercial vehicle systems and drivers to detect unsafe conditions and to verify compliance with regulations. The inspection process includes: reviewing permits, registrations, licenses, shipping papers, and vehicle logs for validity; using fixed or mobile scales to physically weigh vehicles in order to compute gross weight and determine the distribution of wheel and axle loads; measuring the height, length, and width of the vehicle; and, completing inspection reports. Positions are authorized to declare a driver out-of-service and/or impound a vehicle for violations. As needed, a position may request arrests from other law enforcement officers and testify to the facts as a witness during legal proceedings.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the defined level, as described here. Within limits prescribed by the operation, choices involve selecting alternatives that affect the manner and speed with which tasks are carried out. For example, within specified port functions and the inspection processes, a position determines the speed with which an individual inspection is conducted given the conditions of a specific situation. These choices do not affect the standards or results of the operation itself because there is typically only one correct way to carry out the operation. For example, These alternatives include independent choice of such things as priority and personal preference for organizing and processing the work, proper tools or equipment, speed, and appropriate steps in the operation to apply. By nature, the data needed to make decisions can be numerous but are clear and understandable so logic is needed to apply the prescribed alternative. Positions can be taught what to do to carry out assignments and any deviation in the manner in which the work is performed does not change the end result of the operation. For example, positions choose the proper standard or regulation for a specific situation from a range of alternatives, such as legal size and weight parameters, fee and fine schedules, agency policy concerning ticketing, inspection criteria, etc.

Complexity -- The nature of, and need for, analysis and judgment is prescribed, as described here. Positions apply established, standard guidelines which cover work situations and alternatives. Normally, on a regular ongoing basis, the work is systematic and standardized with the position applying the proper criteria. Action taken is based on learned, specific guidelines that permit little deviation or change as the task is repeated. Any alternatives to choose from are clearly right or wrong at each step. Statutes, regulations, and policies concerning size and weight, the type of permit and paperwork required, and fees or fines are specific. When writing a citation or assessing a penalty, a position must choose the correct guideline to apply as an error made on a citation could void the action.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of both of the following:

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. Contact

CLASS SERIES DESCRIPTION (Cont'd.)

PORT OF ENTRY

July 1, 2002

with drivers and/or owners during the inspection process is for the purpose of detecting any safety problems or violations of regulations and policies.

Securing regulatory compliance by issuing or revoking licenses and persuading or training others to correct problems. The primary purpose of this occupation is to verify compliance with regulations which includes issuing or revoking permits. Regardless of the methods used to attempt to obtain compliance, the position can ultimately rely on legal authority to impose sanctions and penalties. As a customer service, positions will clarify regulations and policies in an attempt to gain voluntary compliance from drivers and/or owners; however, positions have the authority to detain operators, issue citations, or impound vehicles in order to fulfill the primary function of regulatory compliance.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

PORT OF ENTRY OFFICER II

H4Q3XX

CONCEPT OF CLASS

This class describes the work leader in a port of entry. In addition to the work of a Port of Entry Officer I, positions train others, monitor and review work, schedule work shifts, and review and resolve complaints. Work leaders in this class also perform tasks related to the operation of a port, such as inventorying supplies, scheduling repairs of equipment and buildings, and selecting the site and setting up mobile scales. This class differs from the Port of Entry Officer I on the Decision Making, Complexity, and possibly Line/Staff Authority factors.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the operational level, as described here. Within limits set by the specific process, choices involve deciding what operation is required to carry out the process. This includes determining how the operation will be completed. For example, the work leader sets procedures to be used by officers at a port when taking enforcement actions during the inspection process. By nature, data needed to make decisions are numerous and variable so reasoning is needed to develop the practical course of action within the established process. In operating a mobile port, the work leader must make decisions regarding the use of assigned personnel and materials at the site. Choices are within a range of specified, acceptable standards, alternatives, and technical practices. For example, work leaders recommend whether or not officers have successfully completed safety/hazardous materials training.

CLASS SERIES DESCRIPTION (Cont'd.)

PORT OF ENTRY

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Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study factual and regulatory information to determine what it means and how it fits together in order to get practical solutions to problems. Guidelines in the form of policies, procedures, standards, and regulations exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. For example, the work leader can deviate from standard operating procedures given the specific situation, such as varying the action taken based on the type of cargo or determining whether a driver can safely proceed or not. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is better than another depending on the given circumstances of the situation. For example, the work leader may adjust the weight tolerance limits due to ice build-up on a vehicle or may ask for a background license check in some cases.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of both of the following:

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. Contact with drivers and/or owners during the inspection process is for the purpose of detecting any safety problems or violations of regulations and policies.

Securing regulatory compliance by issuing or revoking licenses and persuading or training others to correct problems. The primary purpose of this occupation is to verify compliance with regulations which includes issuing or revoking permits. Regardless of the methods used to attempt to obtain compliance, the position can ultimately rely on legal authority to impose sanctions and penalties. As a customer service, positions will clarify regulations and policies in an attempt to gain voluntary compliance from drivers and/or owners; however, positions have the authority to detain operators, issue citations, or impound vehicles in order to fulfill the primary function of regulatory compliance.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as an individual contributor or work leader. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

OR

The work leader is partially accountable for the work product of two or more full-time equivalent positions, including timeliness, correctness, and soundness. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. Typical elements of direct control over other positions by a work leader include assigning tasks, monitoring progress and work flow, checking the product, scheduling work, and establishing work standards. The work leader provides input into supervisory decisions made at higher levels, including signing

CLASS SERIES DESCRIPTION (Cont'd.)

PORT OF ENTRY

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leave requests and approving work hours. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

PORT OF ENTRY OFFICER III

H4Q4XX

CONCEPT OF CLASS

This class describes the first-level supervisor. A unit supervisor oversees and monitors the operation of a port or a division program, establishes work schedules for the work leaders, communicates changes in regulations and policies to subordinates and schedules training, implements and monitors the controlled maintenance program at a port, monitors expenditures and prepares the annual spending plan for a port, prepares reports on counts of activities, and meets with industry representatives and other governmental agencies. The unit supervisor exercises formal supervision over at least three full-time equivalent positions where the supervisory decisions made directly affect the pay, status, and tenure of others. This class differs from the Port of Entry Officer II on the Decision Making, Line/Staff Authority, and possibly Purpose of Contact factors.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making -- The decisions regularly made are at the process level, as described here. Within limits set by safety and regulatory standards, the agency's available technology and resources, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations. In operating a port, the unit supervisor determines the guidelines for conduct of port officers, implements cross-training programs, and sets up joint operations with other governmental agencies. The general pattern, program, or system exists but must be individualized. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in processes. This examination requires the application of known and established theory, principles, conceptual models, professional standards, and precedents in order to determine their relationship to the problem. Unit supervisors apply safety standards and models to determine procedures and protocol for the transportation of hazardous materials through their area, such as nuclear materials. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

Complexity -- The nature of, and need for, analysis and judgment is patterned, as described here. Positions study factual and regulatory information to determine what it means and how it fits together in order to get practical solutions for such things as operational changes. For example, unit supervisors make staffing changes based on information related to port activities and the level of resources. Guidelines in the form of policies, standards, and regulations exist for most situations. Judgment is needed in locating and selecting the most appropriate of these guidelines which may change for varying circumstances as the task is repeated. This selection and interpretation of guidelines involves choosing from alternatives where all are correct but one is

CLASS SERIES DESCRIPTION (Cont'd.)

PORT OF ENTRY

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better than another depending on the given circumstances of the situation. For example, unit supervisors investigate and resolve complaints where the specific solution or action can change depending on circumstances.

Purpose of Contact -- Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of any of the following:

Detecting, discovering, exposing information, problems, violations or failures by interviewing or investigating where the issues or results of the contact are not known ahead of time. For example, positions meet with taxpayers to investigate and resolve complaints.

Securing regulatory compliance by issuing or revoking licenses and persuading or training others to correct problems. Regardless of the methods used to attempt to obtain compliance, the position can ultimately rely on legal authority to impose sanctions and penalties. For example, positions have the authority to detain drivers, issue citations, or impound vehicles in order to gain regulatory compliance. Positions also attempt to persuade industry representatives to voluntarily comply with rules and regulations.

Clarifying underlying rationale, intent, and motive by educating others on unfamiliar concepts and theories or marketing a product or service. This goes beyond what has been learned in training or repeating information that is available in another format. For example, unit supervisors conduct public forums on the division's statutory requirements and services, and train and clarify programs and regulations with industry representatives when reaching the terms of revocable permits.

Line/Staff Authority -- The direct field of influence the work of a position has on the organization is as a unit supervisor. The unit supervisor is accountable, including signature authority, for actions and decisions that directly impact the pay, status, and tenure of three or more full-time equivalent positions. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

ENTRANCE REQUIREMENTS

Minimum entry requirements and general competencies for classes in this series are contained in the State of Colorado Department of Personnel & Administration web site.

For purposes of the Americans with Disabilities Act, the essential functions of specific positions are identified in the position description questionnaires and job analyses.

CLASS SERIES HISTORY

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Effective 7/1/02 (JEM). Abolished vacant Port of Entry Officer IV (H4Q5). Published as proposed 1/18/02.

Revised 9/1/98 (KKF). Change class codes due to PS Consolidation study. Published proposed 3/20/98.

Revised 7/1/98 (KKF). Abolish Port of Entry Officer V as a vacant class. Published proposed 3/20/98.

Effective 7/1/94 (KKF). Change in factors for the I level (decision making and purpose of contact), II level (purpose of contact and line/staff authority), and III level (complexity). Published as proposed 6/10/94.

Revised 5/1/94. Change in occupational group as result of court case settlement.

Effective 9/1/93 (KKF). Job Evaluation System Revision project. Published as proposed 3/22/93.

Revised 7/1/91. Change in occupational group.

Revised 7/1/90. Change in occupational group.

Revised 7/1/86. Changed entrance requirements and created Assistant Chief, Port of Entry (A7106).

Revised 6/1/78. Created the Senior Port of Entry Officer (A7102).

Created 1/1/75. Port of Entry Officer (A7100 - A7101), Port of Entry Supervisor I through III (A7103 - A7105).

SUMMARY OF FACTOR RATINGS

Class Level	Decision Making	Complexity	Purpose of Contact	Line/Staff Authority
Port of Entry Intern	na	na	na	na
Port of Entry Officer I	Defined	Prescribed	Detect & Secure	Indiv. Contributor
Port of Entry Officer II	Operational	Patterned	Detect & Secure	Indiv. Contributor or Work Leader
Port of Entry Officer III	Process	Patterned	Detect, Secure, or Clarify	Unit Supervisor

ISSUING AUTHORITY: Colorado Department of Personnel & Administration



STATE OF COLORADO
CLASS SERIES DESCRIPTION
July 1, 2002

HEARINGS OFFICER

H5F1IX TO H5F3XX

DESCRIPTION OF OCCUPATIONAL WORK

This class series uses three levels in the Professional Services occupational group and describes professional work in presiding over hearings of factual and legal issues and rendering decisions and orders pertaining to the application of law and regulations. Professional work is analytical and evaluative in nature. Decisions require the creative and conceptual application of theory and principles of a professional occupational field. A professional field is one in which knowledge is gained by completion of an advanced course of study resulting in a college degree or equivalent specialized experience. The factors determine the level within this series.

INDEX: Hearings Officer I and II begin on this page, Hearings Officer III begins on page 3.

HEARINGS OFFICER I

H5F1IX

CONCEPT OF CLASS

This class describes the entry level. Positions perform tasks that are structured and designed to provide training and experience. Tasks are performed under direct supervision and detailed instruction and guidance is received. Employees in this class learn to apply theories and principles of the professional field. Positions do not remain at this level indefinitely.

HEARINGS OFFICER II

H5F2TX

CONCEPT OF CLASS

CLASS SERIES DESCRIPTION (Cont'd)

HEARINGS OFFICER

July 1, 2002

This class describes the fully-operational level. Positions operate independently in presiding over the full range of hearings. Work requires the use of discretion within limits of theory and principles of the profession; management's program objectives; law and regulations; and, general systems and guidelines. Judgment is used in the adaptation and skilled application of guidelines to solve the full range of problems related to the assignment. Positions design work process which requires the creative application of relevant theory to draw analogies and approximations. An employee in this class must anticipate and analyze the impact and consequences of decisions made. Positions may serve as a resource to others or a specialist in the professional field. Many assignments will not move beyond this level.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making --The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, hearings process, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations used to complete and conduct different types of hearings. The general pattern, program, or system exists but must be individualized to plan and hear cases. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in work processes. This examination requires the application of known and established statutes, case law, regulations, rules, prior court decisions, theory, due process principles, conceptual models, professional standards, and legal precedents in order to determine their relationship to the problem. For example, a position renders decisions on cases by hearing and analyzing facts pertinent to the case, determining relevant issues, and determining applicable law. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

Complexity --The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of pertinent statutes, case law, regulations, rules, prior court decisions, theories, concepts, and principles in order to tailor them to develop a different approach or plan to fit specific circumstances. While general policy, precedent, or non-specific practices exist, they are inadequate and are therefore relevant only through approximation or analogy. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing guidelines so they can be applied to particular circumstances and to deal with emergencies. For example, a position evaluates the relevance of statutes, case law, and other guidelines along with prior court decisions, arguments, and evidence in order to render decisions in specific cases.

Purpose of Contact --Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of arbitrating, resolving differences, and authorizing action that directly determines the agency's mission. The result directly affects agency policy. For example, a position presides over hearings to render decisions which directly impact agency programs and how they are carried out.

CLASS SERIES DESCRIPTION (Cont'd)

HEARINGS OFFICER

July 1, 2002

Line/Staff Authority --The direct field of influence the work of a position has on the organization is as an individual contributor. The individual contributor may explain work processes and train others. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team. This level may include positions performing supervisory elements that do not fully meet the criteria for the next level in this factor.

HEARINGS OFFICER III

H5F3XX

CONCEPT OF CLASS

This class describes the supervisory level. Positions in this class are accountable for the work product of a unit, including direct control over the work of others. The Hearings Officer III differs from the Hearings Officer II on the Line/Staff Authority factor.

FACTORS

Allocation must be based on meeting all of the four factors as described below.

Decision Making --The decisions regularly made are at the process level, as described here. Within limits set by professional standards, the agency's available technology and resources, hearings process, and program objectives and regulations established by a higher management level, choices involve determining the process, including designing the set of operations used to complete and conduct different types of hearings. The general pattern, program, or system exists but must be individualized to plan and hear cases. This individualization requires analysis of data that is complicated. Analysis is breaking the problem or case into parts, examining these parts, and reaching conclusions that result in work processes. This examination requires the application of known and established statutes, case law, regulations, rules, prior court decisions, theory, due process principles, conceptual models, professional standards, and legal precedents in order to determine their relationship to the problem. For example, a position renders decisions on cases by hearing and analyzing facts pertinent to the case, determining relevant issues, and determining applicable law. New processes or objectives require approval of higher management or the agency with authority and accountability for the program or system.

Complexity --The nature of, and need for, analysis and judgment is formulative, as described here. Positions evaluate the relevance and importance of pertinent statutes, case law, regulations, rules, prior court decisions, theories, concepts, and principles in order to tailor them to develop a different approach or plan to fit specific circumstances. While general policy, precedent, or non-specific practices exist, they are inadequate and are therefore relevant only through approximation or analogy. In conjunction with theories, concepts, and principles, positions use judgment and resourcefulness in tailoring the existing guidelines so they can be applied to particular circumstances and to deal with emergencies. For example, a position evaluates the relevance of statutes, case law, and other guidelines along with prior court decisions, arguments, and evidence in order to render decisions in specific cases.

CLASS SERIES DESCRIPTION (Cont'd)

HEARINGS OFFICER

July 1, 2002

Purpose of Contact --Regular work contacts with others outside the supervisory chain, regardless of the method of communication, are for the purpose of arbitrating, resolving differences, and authorizing action that directly determines the agency's mission. The result directly affects agency policy. For example, a position presides over hearings to render decisions which directly impact agency programs and how they are carried out.

Line/Staff Authority --The direct field of influence the work of a position has on the organization is as a unit supervisor. The unit supervisor is accountable, including signature authority, for actions and decisions that directly impact the pay, status, and tenure of three or more full-time equivalent positions. At least one of the subordinate positions must be in the same series or at a comparable conceptual level. The elements of formal supervision must include providing documentation to support recommended corrective and disciplinary actions, signing performance plans and appraisals, and resolving informal grievances. Positions start the hiring process, interview applicants, and recommend hire, promotion, or transfer.

ENTRANCE REQUIREMENTS

Minimum entry requirements and general competencies for classes in this series are contained in the State of Colorado Department of Personnel & Administration web site.

For purposes of the Americans with Disabilities Act, the essential functions of specific positions are identified in the position description questionnaires and job analyses.

CLASS SERIES HISTORY

Effective 7/1/02 (JEM). Abolished vacant Hearings Officer IV (H5F4). Published as proposed 1/18/02.

Effective 9/1/98 (CVC). PS consolidation study consolidated Appeals Referee (H5B) and Hearings Officer (H5C). Published draft 2/17/98 and proposed 3/20/98.

Effective 9/1/93 (CVC). Job Evaluation System Revision project. Published as proposed 6/1/93. Republished Appeals Referee 9/1/94 as result of appeal.

Revised 8/24/88. Changed grade, class specification, and minimum qualifications for Appeals Referee I and II (A8976-77).

Revised 9/1/84. Changed salary relationship for Appeals Referee I and II (A8976-77).

Revised 7/1/82. Changed grade, relationship, and class specification for Appeals Referee I (A8976). Created Appeals Referee II (A8777).

Revised 2/1/82. Changed nature of work and entrance requirements for Motor Vehicle Hearings Officer A, B, and C (A7131-33).

CLASS SERIES DESCRIPTION (Cont'd)**HEARINGS OFFICER****July 1, 2002**

Revised 9/1/80. Changed entrance requirements.

Revised 7/1/79. Change in relationship for Chief Motor Vehicle Hearings Officer (A7136).

Created 1/1/75. Motor Vehicle Hearings Officer A, B, C, (A7131-33) Assistant Chief Motor Vehicle Hearings Officer (A7134), Chief Motor Vehicle Hearings Officer (A7136), and Appeals Referee (A8976).

SUMMARY OF FACTOR RATINGS

Class Level	Decision Making	Complexity	Purpose of Contact	Line/Staff Authority
Hearings Officer I	na	na	na	na
Hearings Officer II	Process	Formulative	Arbitrate	Indiv. Contributor
Hearings Officer III	Process	Formulative	Arbitrate	Unit Supervisor

ISSUING AUTHORITY: Colorado Department of Personnel & Administration